Phytoplankton Data from a 1976 Cruise in Frobisher Bay

Stephen I.C. Hsiao and Nadia Pinkewycz

Arctic Biological Station
Department of Fisheries and Oceans
Ste-Anne-de-Bellevue, Québec, H9X 3R4

December 1985

Canadian Data Report of Fisheries and Aquatic Sciences No. 575

Fisheries and Oceans Pêches et Océans

Canada

88-02304/

Canadian Data Report of Fisheries and Aquatic Sciences

Data reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of data reports reflects the broad interests and policies of the Department of Fisheries and Oceans, namely, fisheries and aquatic sciences.

Data reports are not intended for general distribution and the contents must not be referred to in other publications without prior written authorization from the issuing establishment. The correct citation appears above the abstract of each report. Data reports are abstracted in *Aquatic Sciences and Fisheries Abstracts* and indexed in the Department's annual index to scientific and technical publications.

Numbers 1–25 in this series were issued as Fisheries and Marine Service Data Records. Numbers 26–160 were issued as Department of Fisheries and the Environment, Fisheries and Marine Service Data Reports. The current series name was introduced with the publication of report number 161.

Data reports are produced regionally but are numbered nationally. Requests for individual reports will be filled by the issuing establishment listed on the front cover and title page. Out-of-stock reports will be supplied for a fee by commercial agents.

Rapport statistique canadien des sciences halieutiques et aquatiques

Les rapports statistiques servent à classer et à archiver les compilations de données pour lesquelles il y a peu ou point d'analyse. Ces compilations auront d'ordinaire été préparées à l'appui d'autres publications ou rapports. Les sujets des rapports statistiques reflètent la vaste gamme des intérêts et des politiques du ministère des Pêches et des Océans, c'est-à-dire les sciences halieutiques et aquatiques.

Les rapports statistiques ne sont pas destinés à une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au-dessus du résumé de chaque rapport. Les rapports statistiques sont résumés dans la revue *Résumés des sciences aquatiques et halieutiques*, et ils sont classés dans l'index annuel des publications scientifiques et techniques du Ministère.

Les numéros 1 à 25 de cette série ont été publiés à titre de relevés statistiques, Services des pêches et de la mer. Les numéros 26 à 160 ont été publiés à titre de rapports statistiques du Service des pêches et de la mer, ministère des Pêches et de l'Environnement. Le nom actuel de la série a été établi lors de la parution du numéro 161.

Les rapports statistiques sont produits à l'échelon régional, mais numérotés à l'échelon national. Les demandes de rapports seront satisfaites par l'établissement auteur dont le nom figure sur la couverture et la page du titre. Les rapports épuisés seront fournis contre rétribution par des agents commerciaux.

Canadian Data Report of
Fisheries and Aquatic Sciences 575

December 1985

PHYTOPLANKTON DATA FROM A 1976 CRUISE IN FROBISHER BAY

by

Stephen I. C. Hsiao and Nadia Pinkewycz

Arctic Biological Station
Department of Fisheries and Oceans
555 St. Pierre Blvd.
Ste-Anne-de-Bellevue, Québec H9X 3R4

(c) Minister of Supply and Services Canada 1985

Cat. No. Fs97-13/0575 ISSN 0706-6465

Correct citation for this publication:

Hsiao, Stephen I. C. and Nadia Pinkewycz. 1985. Phytoplankton data from a 1976 cruise in Frobisher Bay. Can. Data Rep. Fish. Aquat. Sci. 575: iv + 212 p.

CONTENTS

Abstract/Résumé		iv
Acknowledgements		iv
Introduction		1
Materials and Methods		1
References		1
Table 1	Station locations	4
Table 2	Phytoplankton taxa found in the Frobisher Bay cruise of 1976	5
Tables 3-56	Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay	12

ABSTRACT

Hsiao, Stephen I.C. and Nadia Pinkewycz. 1985. Phytoplankton data from a 1976 cruise in Frobisher Bay. Can. Data Rep. Fish. Aquat. Sci. 575: iv + 212 p.

Two hundred and ninety-one phytoplankton samples were collected from 31 stations at depths of 0, 5, 10, 20, 30 and 50m in Frobisher Bay during the summer of 1976. These samples were analyzed for species composition and abundance. The results are tabulated quantitatively, and show that the phytoplankton consisted mainly of diatoms, among which centrics formed the majority of cells, and pennates the majority of species. Chlorophytes, chrysophytes, euglenoids and dinoflagellates occurred in relatively lower numbers both of cells and species.

Key words: Arctic, marine phytoplankton, species composition, abundance.

RESUME

Hsiao, Stephen I.C. and Nadia Pinkewycz. 1985. Phytoplankton data from a 1976 cruise in Frobisher Bay. Can. Data Rep. Fish. Aquat. Sci. 575: iv + 212 p.

Au cours de l'été de 1976, deux cent quatre-vingt-onze échantillons de phytoplancton ont été prélevés à des profondeurs de 0, 5, 10, 20, 30 et 50 m dans 31 stations de la baie Frobisher. Les analyses ont porté sur la composition des espèces et leur abondance. Les résultats sont compilés quantitativement et montrent que le phytoplancton se compose principalement de diatomées dont la plupart des cellules appartiennent aux diatomées centriques et la plupart des espèces aux diatomées pennées. Le nombre de chlorophytes, de chrysophytes, d'euglénoides et de dinoflagellés est relativement faible tant au niveau des cellules que des espèces.

ACKNOWLEDGEMENTS

Special thanks are given to J. Lamoureux, G. Sleno and J. Negrijn for their assistance in obtaining samples during the cruise.

INTRODUCTION

Large areas of the Canadian Arctic have recently been opened to exploration for oil, gas and minerals, and there is consequently an urgent need for increased investigation of phytoplankton. This is necessary for a better understanding of primary productivity and of the trophic relationships between the phytoplankton and dependent higher forms. Species are used as indicators of water masses and as characteristic of their ecological conditions. The species composition of phytoplankton in upper Frobisher Bay was first studied by Bursa (1971), and in nearby waters of Baffin Bay and Davis Strait by Cleve (1896). It is necessary to undertake further studies to determine the species composition, abundance, and geographical and vertical distribution of phytoplankton as they may reflect regional or environmental conditions prior to resource development.

MATERIALS AND METHODS

Water samples for phytoplankton were collected during the cruise of M.V. Calanus from upper to lower Frobisher Bay (Figs. 1 and 2) between 9 and 17 August 1976. For comparison purposes, additional samples were also collected from the upper Bay before and after the cruise. Standard collection procedures were used to obtain 291 samples at 3-6 depths at each of 31 stations, i.e. 0. 5, 10, 20, 30 and 50m. Samples of 125 ml were preserved with neutral formalin at a final concentration of 2% in Boston round polyethylene bottles. The preserved phytoplankton were quantitatively analyzed for species composition and abundance (Foy and Hsiao, 1976). The species were identified with the aid of a Leitz phase-contrast compound microscope. The cells were enumerated by the method of Hsiao (1979) with the aid of a Leitz inverted microscope.

REFERENCES

Bursa, A.S. 1971. Biological oceanographic observations in Frobisher Bay. III. Phytoplankton tables, 1967. Fish. Res. Board Can. Tech. Rep. 267: 21 p.

Cleve, P.T. 1896. Diatoms from Baffin Bay and Davis Strait collected by M.E. Nilsson. Bihang Till Kongl. Sv. Vet. Akad. Handlingar 22(4): 1-22 with 2 plates.

Foy, M.G. and Hsiao, S.I.C. 1976. Phytoplankton data from the Beaufort Sea, 1973 to 1975. Environment Canada, Fish. Mar. Ser. Tech. Rep. 617: 44 p.

Hsiao, S.I.C. 1979. Phytoplankton data and sea ice microalgal data from Frobisher Bay, 1971 to 1978. Fisheries and Environment Canada, Fish. Mar. Serv. Data Rep. 155: 82 p.

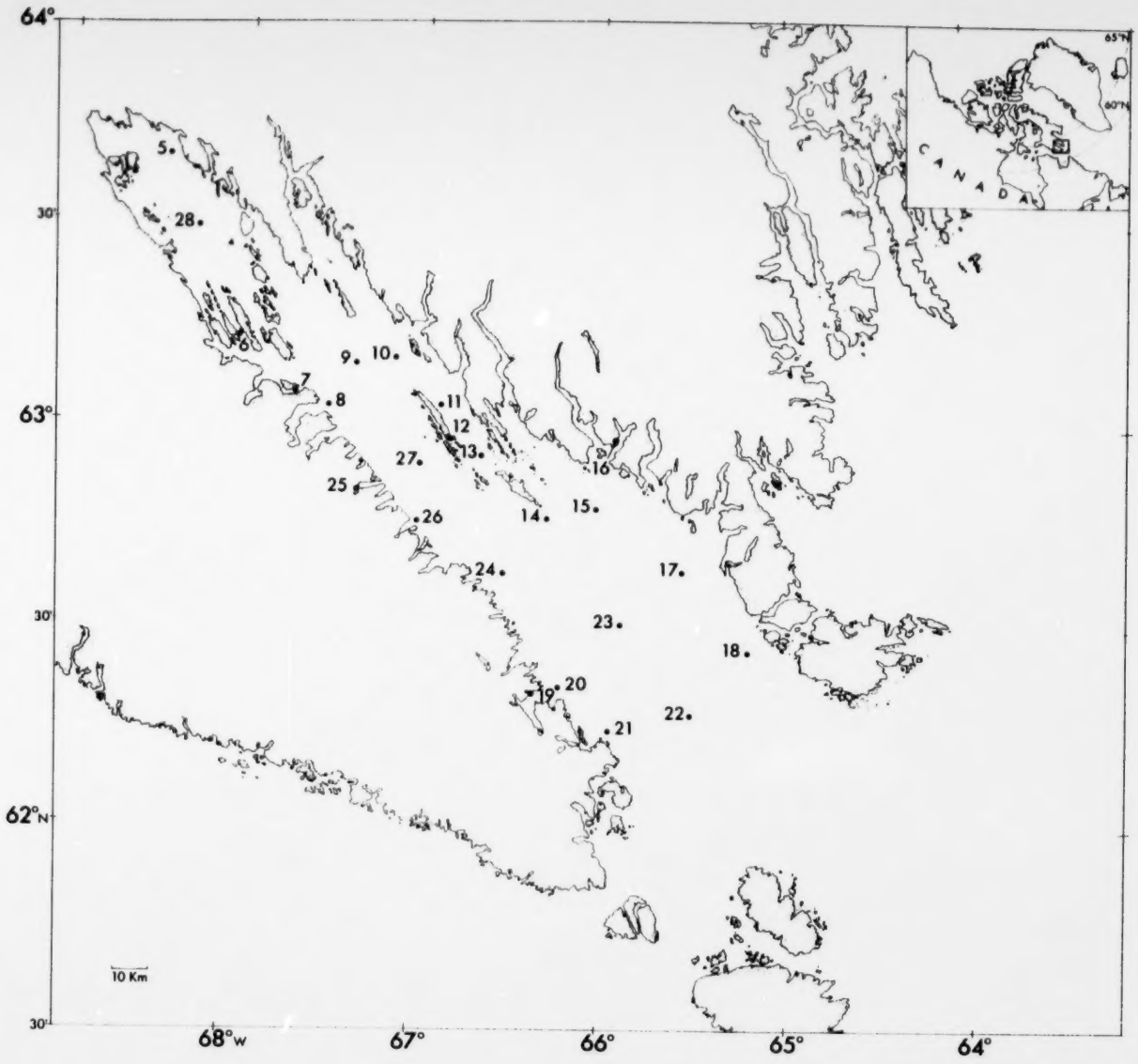

Fig. 1 Station locations in Frobisher Bay.

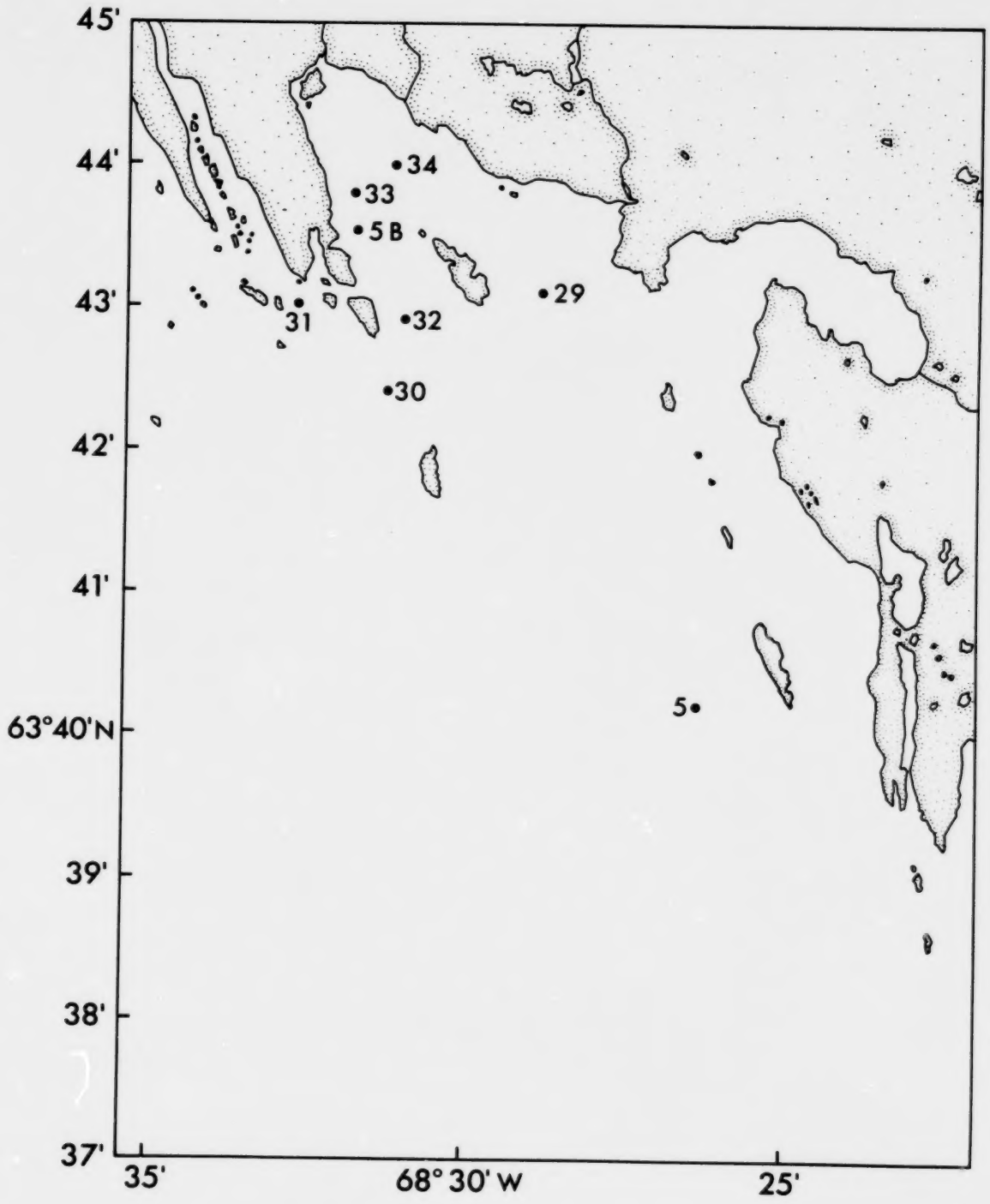

Fig. 2 Station locations in upper Frobisher Bay.

Table 1. Station Locations.

Station	North Latitude	West Longitude
5	63°40.2'	68°26.3'
5B	63°43.5'	68°31.7'
6	63°13.7'	68°01.5'
7	63°05.6'	67°43.7'
8	63°03.6'	67°29.8'
9	63°10.5'	67°21.9'
10	63°11.2'	67°08.2'
11	63°04.3'	66°54.7'
12	62°59.5'	66°51.2'
13	62°57.1'	66°38'
14	62°42.6'	66°18.1'
15	62°49.5'	66°01'
16	62°59.6'	65°56'
17	62°39.7'	65°34'
18	62°28.2'	65°10.5'
19	62°21.6'	66°21.4'
20	62°22.5'	66°13.7'
21	62°16.3'	65°57.8'
22	62°19.4'	65°27'
23	62°32.6'	65°52.1'
24	62°39.2'	66°31'
25	62°51.4'	67°19'
26	62°46.7'	67°01.7'
27	62°55'	66°59.5'
28	63°30'	68°16.5'
29	63°43.1'	68°28.9'
30	63°42.4'	68°31.4'
31	63°43'	68°32.7'
32	63°42.9'	68°31.1'
33	63°43.8'	68°31.8'
34	63°44'	68°31.2'

Table 2. Phytoplankton taxa found in the Frobisher Bay cruise of 1976.

Bacillariophyta
  Centrales
    Biddulphia aurita (Lyngbye) Brébisson et Godey
    Chaetoceros affinis Lauder
    C. atlanticus Cleve
    C. borealis J.W. Bailey
    C. debilis Cleve
    C. decipiens Cleve
    C. diadema (Ehrenberg) Gran
    C. furcellatus J.W. Bailey
    C. holsaticus Schütt
    C. lauderi Ralfs
    C. septentrionalis Östrup
    C. wighami Brightwell
    Coscinodiscus angustelineatus Schmidt
    C. curvatulus Grunow
    C. lacustris var. septentrionalis (Grunow) Rattray
    Cyclotella striata (Kützing) Grunow
    Leptocylindrus danicus Cleve
    Melosira arctica (Ehrenberg) Dickie
    M. islandica O. Muller
    Thalassiosira antarctica Comber
    T. bioculata (Grunow) Ostenfeld
    T. decipiens (Grunow) Joergensen
    T. hyalina (Grunow) Gran
    T. nordenskioeldii Cleve
    T. oestrupii (Ostenfeld) Proschkina-Lavrenko
  Pennales
    Achnanthes brevipes Agardh
    A. groenlandica (Cleve) Grunow
    A. polaris Östrup
    A. taeniata Grunow
    Amphiprora alata (Ehrenberg) Kützing
    A. concilians Cleve
    A. kjellmanii Cleve
    Amphora inelegans Cleve et Grove

Table 2. (cont'd.)

A. inelegans var. polita (Cleve) Peragallo et Peragallo
A. laevis var. laevissima (Gregory) Cleve
A. terroris Ehrenberg
Asterionella formosa Hassall
Cocconeis californica (Grunow) Grunow
C. placentula Ehrenberg
C. pseudomarginata Gregory
C. scutellum Ehrenberg
C. scutellum var. parva (Grunow) Cleve
C. scutellum var. stauroneiformis Rabenhorst
C. thumensis Mayer
Cylindrotheca closterium (Ehrenberg) Reimann et Lewin
Cymbella affinis Kützing
C. ventricosa var. semicircularis (Lagerstedt) Östrup
Diploneis bomboides (Schmidt) Cleve
D. bombus (Ehrenberg) Ehrenberg
D. didyma (Ehrenberg) Ehrenberg
D. litoralis (Donkin) Cleve
D. smithii (Brébisson) Cleve
Eunotia arcus Ehrenberg
E. lunaris (Ehrenberg) Brébisson
Fragilaria bicapitata Mayer
F. bidens Heiberg
F. capucina Desmazières
F. constricta Ehrenberg
F. construens (Ehrenberg) Grunow
F. intermedia (Grunow) Grunow
F. islandica Grunow
F. pinnata Ehrenberg
F. striatula Lyngbye
Fragilariopsis nana (Steemann-Nielsen) Paasche
Gomphonema augur Ehrenberg
G. exiguum var. pachycladum (Brébisson) Cleve
G. gracile Ehrenberg
Grammatophora angulosa Ehrenberg

Table 2. (cont'd.)

G. arctica Cleve
G. hamulifera Kützing
G. hyalina Cleve-Euler
Gyrosigma attenuatum (Kützing) Cleve
G. fasciola (Ehrenberg) Griffith et Henfrey
Hantzschia virgata var. kariana Cleve et Grunow
Licmophora dalmatica (Kützing) Grunow
Navicula algida Grunow
N. ammophila Grunow
N. amphibola Cleve
N. annulata Grunow
N. cancellata Donkin
N. crassirostris Grunow
N. crucigeroides Hustedt
N. cryptocephala Kützing
N. debilissima Grunow
N. directa (Wm. Smith) Ralfs
N. directa var. subtilis (Gregory) Cleve
N. forcipata Greville
N. gastrum (Ehrenberg) Kützing
N. gelida Grunow
N. glacialis (Cleve) Grunow
N. granii (E. Joergensen) Gran
N. grevillei (Agardh) Heiberg
N. humerosa Brébisson
N. imperfecta Cleve
N. kariana Grunow
N. lineola Grunow
N. lyra var. atlantica Schmidt
N. novadecipiens Hustedt
N. peregrina (Ehrenberg) Kützing
N. pygmaea Kützing
N. recurvata Gran
N. rhynchocephala Kützing
N. scutelloides Wm. Smith
N. siberica (Grunow) Cleve

Table 2. (cont'd.)

N. subinflata Grunow
N. transitans Cleve
N. transitans var. derasa (Grunow) Cleve
N. trigonocephala Cleve
N. trigonocephala var. contracta Östrup
N. trigonocephala var. depressa Östrup
N. valida Cleve et Grunow
N. vanhoeffenii Gran
Nedium affinis (Ehrenberg) Pfitzer
Nitzschia acicularis (Kützing) Wm. Smith
N. angularis var. kariana Grunow
N. brebissonii var. borealis Grunow
N. cylindrus (Grunow) Hasle
N. delicatissima Cleve
N. distans Gregory
N. frigida Grunow
N. frustulum (Kützing) Grunow
N. frustulum var. perpusilla (Rabenhorst) Grunow
N. gelida Cleve et Grunow
N. grunowii Hasle
N. linearis (Agardh) Wm. Smith
N. lineata Hasle
N. seriata Cleve
N. sigma (Kützing) Wm. Smith
Opephora martyi Héribaud
Pinnularia interrupta Wm. Smith
P. interrupta f. biceps (Gregory) Cleve
P. quadratarea (Schmidt) Cleve
P. quadratarea var. bicontracta (Östrup) Heiden
P. quadratarea var. bicuneata Heiden et Kolbe
P. quadratarea var. capitata Heiden
P. quadratarea var. densestriata Cleve
Plagiogramma staurophorum (Gregory) Heiberg
Pleurosigma angulatum (Quekett) Wm. Smith
P. elongatum Wm. Smith

Table 2. (cont'd.)

P. longum Cleve
P. marinum Donkin
P. normanii Ralfs
P. stuxbergii Cleve et Grunow
Pseudonitzschia delicatissima (Cleve) Heiden
Rhabdonema arcuatum (Lyngbye) Kützing
R. minutum Kützing
Stauroneis quadripedis (Cleve-Euler) Hendey
S. septentrionalis Grunow
Stenoneis inconspicua var. *baculus* (Cleve) Cleve
Synedra nana Meister
S. pulchella (Ralfs) Kützing
S. tabulata (Agardh) Kützing
Tabellaria fenestrata (Lyngbye) Kützing
T. flocculosa (Roth) Kützing
Thalassionema nitzschioides (Grunow) van Heurck
Thalassiothrix frauenfeldii (Grunow) Grunow
Trachyneis aspera (Ehrenberg) Cleve

Chlorophyta

Ankistrodesmus falcatus (Corda) Ralfs
Carteria vectensis Conrad et Kufferath
Chlamydomonas ballenyana Kol et Flint
C. cyst
C. marina Cohn
C. pulsatilla Wohlenweber
C. tetraolaris Wohlenweber
Closterium Nitzsch
Cosmarium Corda
Dunaliella parva Lerche
Staurastrum Meyen
Trochiscia multispinosa (Moebius) Lemmermann

Chrysophyta

Coccolithus Schwarz
Dinobryon balticum (Schütt) Lemmermann

Table 2. (cont'd.)

D. cylindricum Imhof
Distephanus speculum (Ehrenberg) Haeckel
Phaeocystis pouchetii (Hariot) Lagerheim
Salpingoeca natans Grontved
Synura uvella Ehrenberg

Cyanophyta
Lyngbya putealis Montaigne

Euglenophyta
Euglena agilis H.T. Carter
E. deses Ehrenberg
E. geniculata Dujardin
E. proxima Dangeard
E. schmitzii Gojdics
E. viridis Ehrenberg

Pyrrophyta
Dinophysis acuminata Claparède et Lachmann
D. arctica Mereschkowsky
Glenodinium Ehrenberg
Goniaulax catenata Kofoid
G. cyst
G. monilata Howell
G. scrippsae Kofoid
G. tamarensis Lebour
Gymnodinium lohmanni Paulsen
Gyrodinium spirale (Bergh) Kofoid et Swezy
Oxytoxum Stein
Peridinium depressum Bailey
P. fatulipes Kofoid
P. minusculum Pavillard
P. obtusum Karsten
Polykrikos schwartzii Bütschli
Prorocentrum micans Ehrenberg

Table 2. (cont'd.)

P. rampii Sournia
Protoperidinium achromaticum (Levander) Balech
P. diabolum (Cleve) Balech
P. punctulatum (Paulsen) Balech

Table 3. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 5, July 27, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	3,780	11,200	647,375	1,887,900	8,180	9,850
Bacillariophyta	2,280	4,520	627,800	274,050	6,440	8,820
Centrales	1,460	3,040	588,650	250,850	5,000	8,380
Chaetoceros affinis	-	-	55,100	49,300	1,600	2,320
C. atlanticus	-	-	2,900	-	-	-
C. borealis	-	-	20,300	725	20	-
C. decipiens	40	160	121,800	51,475	780	880
C. furcellatus	180	220	250,850	81,925	1,100	3,560
C. holsaticus	-	20	1,450	1,450	-	-
C. septentrionalis	40	20	11,600	9,425	180	40
C. spores	20	-	-	-	-	-
C. wighami	-	-	85,500	31,900	480	1,100
Coscinodiscus sp.	-	20	-	-	-	-
Melosira arctica	-	-	3,625	-	-	-
Thalassiosira antarctica	-	80	6,525	-	20	-
T. decipiens	740	1,580	20,300	15,225	760	480
T. hyalina	240	820	725	-	-	-
T. nordenskioeldii	200	120	7,975	9,425	60	-
Pennales	820	1,480	39,150	23,200	1,440	440
Achnanthes taeniata	-	-	-	725	-	-
Cocconeis scutellum	-	-	-	-	-	20
C. scutellum var. *parva*	-	-	-	1,450	-	-
C. scutellum var. *stauroneiformis*	-	20	-	-	-	-
C. thumensis	-	20	-	-	-	-

Table 3. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Cylindrotheca closterium	60	40	-	-	-	20
Cymbella affinis	40	80	-	2,175	-	-
Diploneis litoralis	100	120	725	725	-	-
Eunotia arcus	-	-	-	-	20	-
Fragilaria bicapitata	100	80	1,450	1,450	160	20
F. intermedia	20	20	1,450	-	-	-
F. pinnata	-	80	2,175	2,900	20	40
F. striatula	-	20	2,900	-	-	-
Fragilariopsis nana	20	-	-	-	-	-
Gomphonema sp.	40	60	-	725	40	-
G. augur	-	-	725	-	-	-
G. gracile	-	40	-	1,450	-	-
Grammatophora arctica	20	-	-	-	-	-
Navicula ammophila	40	20	-	-	-	-
N. cancellata	20	-	-	-	-	-
N. cryptocephala	-	40	725	-	-	-
N. debilissima	-	-	1,450	-	20	40
N. directa var. subtilis	-	20	-	725	-	-
N. forcipata	-	20	-	-	-	-
N. granii	-	-	10,875	-	-	-
N. grevillei	-	20	-	-	-	-
N. lineola	-	-	-	-	-	40

Table 3. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. novadecipiens	-	-	-	-	20	-
N. peregrina	60	120	725	2,175	80	20
N. transitans	-	40	725	-	20	-
N. transitans var. *derasa*	40	20	1,450	725	-	-
Nitzschia acicularis	20	40	-	-	-	20
N. angularis var. *kariana*	20	-	-	-	-	-
N. cylindrus	120	80	1,450	-	260	20
N. delicatissima	-	20	-	-	-	-
N. frigida	-	-	-	-	40	-
N. grunowii	40	220	10,150	7,975	660	160
N. lineata	40	140	-	-	100	40
N. seriata	20	-	-	-	-	-
Pinnularia sp.	-	100	1,450	-	-	-
Rhabdonema arcuatum	-	-	725	-	-	-
Chlorophyta						
Ankistrodesmus falcatus	1,000	1,440	7,975	7,250	340	360
Chlamydomonas ballenyana	20	-	-	-	-	-
C. cyst	20	20	1,450	-	40	-
C. tetraolaris	200	-	-	-	-	-
Dunaliella parva	660	1,140	5,800	4,350	200	260
Unidentified	80	280	-	-	100	100
	20	-	725	2,900	-	-

Table 3. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chrysophyta						
Coccolithus sp.	300	4,820	9,425	2,175	1,140	20
Dinobryon balticum	-	4,000	4,350	-	1,040	-
D. cylindricum	20	200	2,175	-	40	-
Phaeocystis pouchetii	-	20	-	-	-	-
Synura uvella	60	80	725	725	60	20
Unidentified	20	-		1,450	-	-
	200	520	2,175	-	-	-
Euglenophyta						
Euglena proxima	-	80	725	1,450	80	60
E. schmitzii	-	-	-	-	40	-
	-	80	725	1,450	40	60
Pyrrophyta						
Dinophysis acuminata	180	280	1,450	725	180	180
D. arctica	-	-	-	-	-	20
Glenodinium sp.	-	20	-	-	-	-
Goniaulax monilata	-	20	-	-	120	-
Gyrodinium spriale	20	-	-	-	-	-
Peridinium depressum	20	60	-	-	-	-
P. minusculum	-	40	-	-	-	-
P. obtusum	20	-	-	-	-	-
Prorocentrum sp.	40	-	-	-	-	-
P. micans	20	20	-	-	20	60
P. rampii	-	100	1,450	-	-	-
	60	20	-	725	40	100
Unidentified algal cyst	20	60	-	1,602,250	-	410

Table 4. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at Station 5, August 3, 1976.

Seawater depth (m)	0	5	10	30	50
Total phytoplankton (cells/litre)	9,800	4,040	8,240	15,620	12,680
Bacillariophyta	7,020	2,000	3,040	11,240	10,140
Centrales	5,660	1,680	2,200	9,980	9,120
Chaetoceros affinis	160	60	160	1,880	1,200
C. borealis	-	40	-	-	-
C. decipiens	740	280	240	1,420	820
C. furcellatus	2,100	480	560	5,680	5,360
C. septentrionalis	420	40	100	380	420
C. wighami	-	-	-	140	520
Coscinodiscus sp.	-	-	20	-	-
Thalassiosira sp.	140	40	-	20	20
T. decipiens	2,040	720	1,120	460	780
T. nordenskioeldii	-	20	-	-	-
T. oestrupii	60		-	-	-
Pennales	1,360	320	840	1,260	1,020
Achnanthes taeniata	20	-	-	120	20
Amphiprora sp.	20	-	-	-	-
Amphora sp.	20	-	-	20	-
A. inelegans var. *polita*	20	-	-	-	-
Cocconeis californica	-	-	-	20	-
C. scutellum	60	-	20	80	60
C. thumensis	60	20	-	-	-
Cylindrotheca closterium	60	20	-	20	20
Diploneis bomboides	20	-	-	-	-

Table 4. (Cont'd)

Seawater depth (m)	0	5	10	30	50
D. litoralis	20	-	40	-	-
Fragilaria bicapitata	20	20	-	-	60
F. intermedia	-	-	-	-	60
F. pinnata	40	20	20	100	60
F. striatula	140	-	-	-	20
Gomphonema sp.	20	20	-	-	40
G. gracile	20	-	-	-	-
Hantzschia virgata var. kariana	-	-	-	20	20
Licmophora sp.	-	-	20	20	-
Navicula ammophila	40	-	-	60	-
N. cancellata	-	60	-	-	-
N. directa	20	-	40	60	-
N. directa var. subtilis	120	20	40	40	20
N. grevillei	-	-	-	-	20
N. peregrina	60	20	40	40	60
N. transitans var. derasa	40	-	-	20	-
N. valida	20	-	-	-	20
Nitzschia acicularis	20	-	-	80	-
N. angularis var. kariana	-	-	-	20	-
N. cylindrus	220	20	340	60	120
N. distans	-	-	-	20	-
N. frustulum	-	-	-	100	20
N. grunowii	140	60	160	320	280
N. linearis	-	20	-	-	-

Table 4. (Cont'd)

Seawater depth (m)	0	5	10	30	50
N. lineata	40	-	-	-	80
Opephora martyi	-	-	60	-	-
Pinnularia sp.	20	-	-	40	-
P. quadratarea	-	-	-	-	40
Pleurosigma sp.	20	-	-	-	-
Synedra sp.	60	20	60	-	-
Chlorophyta	2,000	1,920	4,440	3,880	1,980
Chlamydomonas ballenyana	80	-	-	-	140
C. cyst	120	1,200	3,680	2,480	580
C. tetraolaris	1,520	520	440	1,020	1,180
Dunaliella parva	200	140	320	380	80
Trochiscia multispinosa	20	-	-	-	-
Unidentified	60	60	-	-	-
Chrysophyta	160	40	300	240	180
Phaeocystis pouchetii	100	-	60	140	80
Salpingoeca natans	60	-	100	20	20
Unidentified	-	40	140	80	80
Euglenophyta	-	-	-	80	40
Euglena deses	-	-	-	20	-
E. schmitzii	-	-	-	60	40

Table 4. (Cont'd)

Seawater depth (m)	0	5	10	30	50
Pyrrophyta	620	80	460	180	340
Glenodinium sp.	140	20	100	20	-
Goniaulax sp.	40	-	-	-	-
G. catenata	-	20	-	-	20
G. scrippsae	-	-	40	-	-
Gymnodinium lohmanni	-	-	-	-	20
Gyrodinium spirale	20	-	40	60	60
Oxytoxum sp.	-	-	-	20	20
Peridinium sp.	20	-	20	-	-
Prorocentrum sp.	20	-	-	60	40
P. micans	60	-	60	20	20
P. rampii	240	20	180	-	160
Protoperidinium diabolus	80	20	20	-	-

Table 5. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at Station 5, August 9, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	32,020	41,780	37,680	41,470	31,260	27,980
Bacillariophyta	27,400	23,620	27,920	37,290	27,440	24,720
Centrales	26,040	21,240	26,320	35,170	25,640	23,320
Chaetoceros affinis	1,400	960	1,460	2,460	980	740
C. borealis	-	40	-	-	-	40
C. decipiens	1,360	420	660	1,730	1,420	1,020
C. furcellatus	21,600	17,040	21,580	28,940	21,740	20,820
C. holsaticus	-	60	-	100	-	100
C. septentrionalis	500	1,220	1,440	580	780	220
C. spore	20	-	-	-	-	-
C. wighami	240	160	40	140	100	-
Coscinodiscus angustelineatus	-	20	-	-	20	-
Cyclotella sp.	-	-	-	-	-	20
Thalassiosira sp.	280	700	240	609	260	40
T. decipiens	640	580	860	1,160	340	300
T. nordenskioeldii	-	20	20	-	-	-
T. oestrupii	-	20	20	-	-	20
Pennales	1,360	2,380	1,600	2,120	1,800	1,400
Achnanthes taeniata	20	-	-	-	240	-
Amphora angusta var. *ventricosa*	-	-	-	-	40	40
A. inelegans	-	40	-	-	-	-
A. inelegans var. *polita*	40	-	-	-	-	-
A. laevis var. *laevissima*	-	40	-	-	-	-
A. terroris	60	80	40	100	-	-

Table 5. (Cont'd)

Seawater depth (m)	0	5	10	20	30	50
Cocconeis placentual	-	20	-	-	-	-
C. scutellum	60	20	40	20	20	-
C. scutellum var. parva	40	-	-	20	20	-
C. thumensis	-	-	-	-	20	-
Cylindrotheca closterium	20	-	40	-	-	-
Cymbella affinis	-	-	20	-	-	-
Diploneis litoralis	-	40	20	-	20	-
D. smithii	-	-	-	20	-	-
Fragilaria sp.	20	60	40	60	20	40
F. bicapitata	20	60	20	20	-	-
F. intermedia	-	40	-	-	20	-
F. pinnata	40	-	160	40	20	80
F. striatula	-	20	-	-	-	-
Gomphonema sp.	-	-	60	-	20	-
G. gracile	-	-	-	-	-	20
Navicula sp.	-	20	-	20	20	40
N. algida	-	-	20	-	-	-
N. ammophila	-	20	20	-	-	80
N. amphibola	-	20	-	-	-	-
N. cancellata	-	60	-	-	20	40
N. crassirostris	-	20	-	-	-	-
N. cryptocephala	20	20	-	-	20	-
N. directa	-	20	-	40	-	-
N. directa var. subtilis	-	40	20	40	-	-

Table 5. (Cont'd)

Seawater depth (m)	0	5	10	20	30	50
N. granii	220	80	-	-	-	-
N. grevillei	-	20	-	-	-	20
N. peregrina	40	20	120	20	-	-
N. transitans var. *derasa*	-	60	20	-	20	-
N. valida	-	-	-	-	-	20
Nitzschia acicularis	-	60	40	60	20	-
N. cylindrus	-	60	140	-	40	20
N. grunowii	700	1,040	760	460	1,040	940
N. linearis	-	-	-	-	40	-
N. lineata	-	140	-	1,180	-	-
N. seriata	-	-	-	-	20	-
Opephora martyi	-	-	20	-	-	-
Pinnularia sp.	-	-	-	20	20	-
Rhabdonema arcuatum	-	-	-	-	80	-
Stauroneis quadripedis	-	240	-	-	-	-
Synedra sp.	40	20	-	-	-	-
S. tabulata	-	-	-	-	20	60
Tabellaria fenestrata	20	-	-	-	-	-
Chlorophyta	4,260	17,040	8,840	3,780	3,680	2,920
Chlamydomonas ballenyana	-	80	-	-	-	-
C. cyst	820	8,980	4,080	1,000	1,120	1,100
C. tetraolaris	3,100	7,540	4,400	2,620	2,480	1,760
Dunaliella parva	340	440	360	160	80	60

Table 5. (Cont'd)

Seawater depth (m)	0	5	10	20	30	50
Chrysophyta	160	320	400	160	60	160
Dinobryon balticum	-	40	100	-	-	-
Phaeocystis pouchetii	140	220	180	100	60	140
Salpingoeca natans	-	20	40	-	-	20
Unidentified	20	40	80	60	-	-
Euglenophyta	40	80	120	-	-	-
Euglena proxima	-	20	-	-	-	-
E. schmitzii	40	60	120	-	-	-
Pyrrophyta	160	720	400	240	80	180
Dinophysis acuminata	-	20	-	-	-	-
Goniaulax monilata	-	-	-	20	-	-
Gymnodinium lohmanni	-	40	-	-	-	-
Gyrodinium spirale	-	160	120	40	20	40
Oxytoxum sp.	-	20	-	-	-	-
Prorocentrum sp.	40	20	40	-	-	60
P. micans	-	-	60	40	-	-
P. rampii	120	440	160	100	60	80
Protoperidinium diabolus	-	20	-	-	-	-
Unidentified algae cyst	-	-	20	40	-	-

Table 6. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at Station 5, August 17, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	14,140	17,320	451,572	344,850	287,496	409,464
Bacillariophyta	14,040	16,980	439,230	339,042	282,414	405,834
Centrales	13,160	16,120	430,518	310,002	255,552	377,520
Chaetoceros affinis	220	420	6,534	4,356	-	-
C. decipiens	140	900	23,958	13,794	6,534	16,698
C. furcellatus	12,680	14,460	393,492	289,674	246,114	360,822
C. septentrionalis	60	60	1,452	1,452	726	-
C. wighami	40	-	2,904	-	1,452	-
Thalassiosira decipiens	20	280	2,178	726	726	-
Pennales	880	860	8,712	29,040	26,862	28,314
Achnanthes taeniata	40	-	1,452	726	726	-
Amphora inelegans	-	-	1,452	-	-	-
Cocconeis scutellum	-	-	726	726	-	-
C. scutellum var. *parva*	-	20	-	-	-	-
Diploneis sp.	20	-	-	-	726	-
Fragilaria sp.	80	60	726	-	726	726
F. bicapitata	40	-	-	-	-	-
F. pinnata	40	20	2,904	3,630	3,630	-
Gomphonema sp.	-	-	-	-	726	-
G. augur	-	-	-	-	726	-
G. exiquum var. *pachycladum*	-	-	-	726	-	-
Licmophora sp.	-	20	-	-	-	-
Navicula sp.	20	20	726	-	-	726

Table 6. (Cont'd)

Seawater depth (m)	0	5	10	20	30	50
N. crassirostris	-	-	-	-	726	-
N. directa	-	20	-	-	-	-
N. directa var. *subtilis*	20	120	-	-	-	726
N. grevillei	-	20	-	-	-	-
N. subinflata	-	20	-	-	-	-
N. transitans	20	-	726	-	726	726
Nitzschia cylindrus	20	20	-	1,452	726	726
N. frustulum	-	-	-	-	726	726
N. grunowii	540	480	-	21,780	16,698	21,780
N. linearis	20	-	-	-	-	-
N. seriata	-	40	-	-	-	-
Pseudonitzschia delicatissima	-	-	-	-	-	1,452
Synedra sp.	-	-	-	-	-	726
Trachyneis aspera	20	-	-	-	-	-
Chlorophyta	80	220	4,356	2,178	3,630	726
Chlamydomonas sp.	20	40	2,904	1,452	-	726
C. ballenyana	60	180	1,452	-	3,630	-
C. pulsatilla	-	-	-	726	-	-
Chrysophyta	20	-	1,452	1,452	726	-
Dinobryon sp.	-	-	-	726	726	-
D. cylindricum	-	-	-	726	-	-
Salpingoeca natans	20	-	726	-	-	-
Unidentified	-	-	726	-	-	-

Table 6. (Cont'd)

Seawater depth (m)	0	5	10	20	30	50
Euglenophyta	-	-	726	-	-	-
Euglena proxima	-	-	726	-	-	-
Pyrrophyta	-	120	5,808	2,178	726	2,904
Goniaulax cyst	-	20	-	-	-	-
Gymnodinium sp.	-	-	1,452	1,452	-	726
Gyrodinium spirale	-	60	2,904	-	726	2,178
Prorocentrum sp.	-	-	1,452	726	-	-
P. micans	-	20	-	-	-	-
Protoperidinium diabolus	-	20	-	-	-	-

Table 7. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 5, August 24, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	8,880	13,160	9,760	23,880	17,140	12,760
Bacillariophyta	8,740	12,980	9,520	23,580	16,820	12,460
Centrales	6,960	11,580	8,360	21,560	14,580	10,760
Biddulphia aurita	-	-	-	20	-	-
Chaetoceros affinis	-	220	200	680	200	100
C. borealis	-	40	-	-	-	-
C. decipiens	220	600	560	1,740	920	640
C. furcellatus	6,580	10,420	7,360	18,960	13,200	9,900
C. septentrionalis	60	40	-	40	20	80
C. wighami	-	200	180	-	80	-
Thalassiosira decipiens	100	60	60	120	160	40
Pennales	1,780	1,400	1,160	2,020	2,240	1,700
Achnanthes taeniata	20	-	-	-	40	-
Amphora inelegans	40	40	40	-	-	-
Cocconeis scutellum	20	-	-	-	40	-
C. scutellum var. parva	-	-	20	20	-	20
Cylindrotheca closterium	40	-	-	-	-	-
Eunotia lunaris	-	-	-	-	-	20
Fragilaria sp.	40	20	-	40	60	-
F. bicapitata	20	20	-	-	-	-
F. pinnata	160	160	80	60	60	40
Gomphonema sp.	20	20	-	-	20	20
Grammatophora angulosa	20	-	-	-	-	-
Licmophora sp.	-	-	-	20	-	-

Table 7. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Navicula sp.	60	-	-	40	40	-
N. cancellata	-	-	-	20	-	-
N. debilissima	20	20	20	40	-	-
N. directa	20	-	20	-	-	-
N. directa var. *subtilis*	-	20	-	-	-	-
N. grevillei	40	-	-	-	-	-
N. peregrina	-	-	-	-	20	20
N. rhynchocephala	-	-	20	-	-	20
N. transitans	-	-	-	20	-	-
N. transitans var. *derasa*	40	20	-	-	20	-
Nitzschia sp.	20	-	-	-	-	-
N. cylindrus	60	120	40	20	120	-
N. grunowii	1,060	960	920	1,720	1,820	1,540
N. linearis	-	-	-	20	-	-
Pinnularis sp.	20	-	-	-	-	-
Synedra sp.	-	-	-	-	-	20
Tabellaria sp.	20	-	-	-	-	-
T. flocculosa	40	-	-	-	-	-
Chlorophyta	100	100	100	100	140	120
Chlamydomonas ballenyana	80	60	40	60	100	20
C. pulsatilla	20	40	60	40	140	100

Table 7. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chrysophyta						
Dinobryon balticum	20	20	80	20	60	40
D. cylindricum	-	-	-	20	20	-
Salpingoeca natans	20	-	-	-	-	-
Unidentified	-	20	40	-	-	20
	-	-	40	-	40	20
Euglenophyta						
Euglena acus	-	-	-	40	-	20
E. proxima	-	-	-	20	-	-
	-	-	-	20	-	20
Pyrrophyta						
Goniaulax sp.	20	60	60	140	120	120
Gymnodinium lohmanni	20	-	-	20	-	-
Gyrodinium spirale	-	20	20	60	-	-
Prorocentrum rampii	-	40	20	40	60	100
Protoperidinium diabolus	-	-	20	-	20	-
	-	-	-	20	40	20

Table 8. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 5, August 31, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	2,152,590	2,503,248	2,523,576	2,268,024	2,671,680	1,754,016
Bacillariophyta	2,138,796	2,485,824	2,510,508	2,252,778	2,656,434	1,735,866
Centrales	2,130,084	2,481,468	2,508,330	2,244,792	2,651,352	1,734,414
Chaetoceros affinis	15,246	16,698	12,342	13,068	31,218	10,890
C. atlanticus	1,452	-	-	-	-	-
C. decipiens	21,780	25,410	18,150	37,026	18,150	26,136
C. furcellatus	2,016,828	2,353,692	2,367,486	2,068,374	2,511,234	1,638,582
C. landeri	-	-	-	5,082		
C. septentrionalis	2,178	2,904	7,986	2,178	1,452	4,356
C. wighami	34,122	38,478	43,560	55,176	47,190	6,534
Thalassiosira sp.	13,068	18,150	23,232	27,588	21,054	23,232
T. decipiens	25,410	26,136	35,574	36,300	21,054	24,684
Pennales	8,712	4,356	2,178	7,986	5,082	1,452
Cocconeis sp.	726	-	-	-	-	-
C. thumensis	-	-	-	726	-	-
Cylindrotheca closterium	2,904	2,904	726	-	-	-
Fragilaria sp.	-	-	726	-	-	-
F. pinnata	726	-	-	-	-	-
Grammatophora hamulifera	-	-	-	-	726	-
Licmophora sp.	-	726	-	-	726	-
Navicula sp.	2,178	-	726	726	1,452	726
N. directa var. subtilis	-	-	-	726	-	-
N. granii	726	-	-	-	-	-

Table 8. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Nitzschia sp.	726	-	-	-	-	-
N. acicularis	-	-	-	1,452	726	-
N. cylindrus	726	-	-	2,178	726	726
N. grunowii	-	726	-	1,452	726	-
Rhabdonema minutum	-	-	-	726	-	-
Chlorophyta	9,438	7,986	9,438	12,342	12,342	15,246
Ankistrodesmus sp.	-	-	-	1,452	2,178	-
Carteria vertensis	726	-	-	726	-	-
Chlamydomonas sp.	-	-	-	726	-	-
C. ballenyana	7,260	5,808	4,356	4,356	7,986	11,616
C. pulsatilla	1,452	2,178	2,178	5,082	2,178	3,630
Staurastrum sp.	-	-	2,904	-	-	-
Chrysophyta	726	2,178	1,452	1,452	1,452	-
Phaeocystis pouchetii	726	2,178	1,452	1,452	1,452	-
Euglenophyta	1,452	2,178	726	-	-	-
Euglena schmitzii	1,452	2,178	726	-	-	-
Pyrrophyta	2,178	5,082	1,452	1,452	1,452	2,904
Goniaulax sp.	-	726	-	726	-	-
G. scrippsae	726	-	-	726	-	-
Gymnodinium lohmanni	726	-	-	-	726	1,452

Table 8. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Peridinium sp.	-	1,452	-	-	726	-
Prorocentrum rampii	726	2,178	1,452	-	-	-
Protoperidinium diabolus	-	726	-	-	-	1,452

Table 9. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 5B, July 28, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	4,540	6,500	4,080	6,780
Bacillariophyta	3,840	4,760	2,180	5,300
Centrales	1,200	2,080	1,000	3,840
Chaetoceros affinis	100	40	20	260
C. borealis	20	60	40	-
C. decipiens	120	40	20	460
C. furcellatus	260	160	60	1,800
C. septentrionalis	80	80	20	100
C. wighami	-	-	-	60
Coscinodiscus sp.	-	-	20	-
Cyclotella striata	-	20	-	-
Thalassiosira antarctica	-	-	-	180
T. decipiens	600	1,560	740	840
T. nordenskioeldii	20	100	80	120
Pennales	2,640	2,680	1,180	1,460
Achnanthes taeniata	-	20	-	-
Amphora inelegans	20	120	-	40
Caloneis linearis	-	-	-	20
Cocconeis scutellum	80	40	20	20
C. thumensis	40	60	20	-
Cylindrotheca closterium	40	-	-	80
Cymbella affinis	180	180	20	40
Diploneis didyma	-	20	-	-

Table 9. (Cont'd.)

Seawater depth (m)	0	5	10	20
D. litoralis	40	-	-	-
D. smithii	20	-	-	-
Eunotia arcus	-	20	-	-
Fragilaria sp.	-	-	20	-
F. bicapitata	40	220	-	40
F. pinnata	180	120	40	20
F. striatula	-	40	-	-
Gomphonema sp.	20	20	-	-
G. exiquum var. *pachycladum*	-	40	-	20
G. gracile	160	80	-	20
Grammatophora arctica	20	-	-	-
Licmophora gracilis	-	-	40	-
Navicula ammophila	60	20	-	60
N. cancellata	-	-	180	-
N. crassirostris	-	-	-	20
N. cryptocephala	20	-	-	-
N. debilissima	60	40	-	-
N. directa	-	-	20	-
N. directa var. *subtilis*	-	120	100	40
N. forcipata	20	-	-	-
N. granii	-	-	60	200
N. grevillei	40	-	-	20
N. kariana	-	-	-	20
N. lineola	40	60	20	-

Table 9. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. peregrina	100	180	60	120
N. transitans var. *derasa*	480	360	-	-
N. trigonocephala var. *depressa*	20	-	-	-
N. vanhoeffenii	-	-	200	-
Nedium affinis	-	-	20	-
Nitzschia acicularis	40	-	40	20
N. cylindrus	20	120	-	60
N. frigida	20	-	-	40
N. frustulum	20	-	-	-
N. frustulum var. *perpusilla*	20	-	-	-
N. grunowii	240	140	100	80
N. lineata	100	320	140	140
N. seriata	20	-	-	-
Pinnularia sp.	320	180	-	100
P. quadratarea	40	40	-	20
P. quadratarea var. *bicuneata*	-	80	-	-
Pleurosigma elongatum	20	20	20	20
P. marinum	-	-	-	40
Tabellaria fenestrata	-	20	-	-
T. flocculosa	8	-	20	160
Thalassiothrix frauenfeldii	-	-	40	-
Chlorophyta	360	920	1,560	440
Ankistrodesmus falcatus	-	-	20	-

Table 9. (Cont'd.)

Seawater depth (m)	0	5	10	20
Chlamydomonas ballenyana	40	160	220	20
C. cyst				
C. tetraolaris	100	440	-	200
Dunaliella parva	180	300	-	220
Trochiscia multispinosa	-	20	-	-
Unidentified	40	-	-	-
Chrysophyta	220	600	300	160
Dinobryon balticum	40	300	160	100
D. cylindricum	20	-	-	-
Phaeocystis pouchetii	-	20	20	40
Synura uvella	40	160	-	-
Unidentified	120	200	120	20
Euglenophyta	60	40	-	60
Euglena proxima	-	-	-	60
E. schmitzii	60	40	-	-
Pyrrophyta	60	180	40	160
Goniaulax monilata	-	-	20	-
Oxytoxum sp.	-	20	-	-
Peridinium sp.	-	20	-	20
P. minusculum	-	20	-	-
Prorocentrum sp.	60	-	-	40

Table 9. (Cont'd.)

Seawater depth (m)	0	5	10	20
P. micans	-	120	-	-
P. rampii	-	-	20	100
Unidentified algal cyst	-	-	-	660

Table 10. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 58, August 3, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	8,100	13,660	53,050	26,020
Bacillariophyta	6,860	8,560	45,010	19,500
Centrales	3,980	6,940	42,510	17,840
Biddulphia aurita	20	-	-	-
Chaetoceros affinis	60	200	3,260	900
C. borealis	40	-	-	-
C. decipiens	180	740	2,100	760
C. furcellatus	2,920	4,080	35,660	14,520
C. holsaticus	-	-	-	20
C. septentrionalis	120	600	1,100	500
C. spores	-	20	-	-
C. wighami	-	-	-	40
Coscinodiscus sp.	40	-	-	-
C. angustelineatus	-	-	-	20
Cyclotella striata	-	20	-	20
Thalassiosira sp.	80	100	-	60
T. decipiens	460	1,160	1,380	920
T. nordenskioeldii	40	20	-	-
Pennales	2,880	1,620	2,500	1,660
Achnanthes taeniata	80	40	-	-
Amphora sp.	-	-	20	-
A. inelegans var. polita	100	40	-	40
A. terroris	160	-	40	20

Table 10. (Cont'd.)

Seawater depth (m)	0	5	10	20
Asterionella formosa	20	-	-	-
Cocconeis scutellum	100	60	60	120
C. scutellum var. parva	-	-	60	20
Cylindrotheca closterium	20	-	20	20
Cymbella affinis	20	-	-	20
Diploneis litoralis	-	20	-	-
D. smithii	-	-	-	20
Eunotia sp.	-	-	-	40
Fragilaria sp.	20	100	-	20
F. bicapitata	40	-	40	40
F. bidens	20	-	-	-
F. intermedia	-	40	-	-
F. pinnata	260	-	200	160
F. striatula	180	20	80	80
Gomphonema sp.	20	20	-	-
G. augur	20	-	-	-
Navicula sp.	-	-	20	-
N. ammophila	260	40	160	60
N. amphibola	20	-	20	-
N. cancellata	260	100	-	20
N. cryptocephala	80	20	40	-
N. directa	-	20	-	40
N. directa var. subtilis	100	20	-	-
N. granii	-	-	-	20

Table 10. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. grevillei	80	20	20	40
N. kariana	-	-	20	-
N. lineola	60	40	-	-
N. peregrina	40	120	60	60
N. transitans var. derasa	100	60	20	-
N. valida	100	20	40	20
Nitzschia acicularis	20	60	40	40
N. cylindrus	220	380	120	200
N. frigida	-	-	40	-
N. frustulum	-	-	60	40
Nitzschia grunowii	280	240	1,060	220
N. linearis	80	-	-	40
N. lineata	-	40	100	120
N. seriata	-	20	20	-
Pinnularia sp.	80	-	-	-
P. quadratarea	20	40	80	-
P. quadratarea var. bicontracta	-	-	-	20
Pleurosigma elongatum	-	-	-	20
P. stuxbergii	-	20	-	60
Rhabdonema arcuatum	-	-	20	-
Synedra sp.	-	-	-	20
S. pulchella	-	-	20	-
S. tabulata	-	20	20	20
Tabellaria fenestrata	20	-	-	-

Table 10. (Cont'd.)

Seawater depth (m)	0	5	10	20
Chlorophyta	1,000	4,480	7,380	5,760
Ankistrodesmus falcatus	20	40	-	-
Chlamydomonas ballenyana	20	40	-	20
C. cysts	-	2,320	2,600	1,220
C. pulsatilla	100	20	-	-
C. tetraolaris	620	1,600	4,360	4,100
Dunaliella parva	240	460	420	420
Chrysophyta	60	260	160	260
Dinobryon balticum	-	40	-	20
Phaeocystis pouchetii	20	20	100	120
Salpingoeca natans	-	120	20	20
Unidentified	40	80	40	100
Euglenophyta	40	120	140	40
Euglena agilis	-	20	-	-
E. geniculata	-	20	-	-
E. proxima	-	-	40	20
E. schmitzii	40	80	100	20
Pyrrophyta	140	240	360	460
Glenodinium sp.	-	-	-	20
Goniaulax sp.	-	-	20	20
Gyrodinium spirale	-	20	120	120

Table 10. (Cont'd.)

Seawater depth (m)	0	5	10	20
Oxytoxum sp.	-	20	-	-
Prorocentrum sp.	20	20	-	-
P. micans	-	60	-	-
P. rampii	120	120	220	300

Table 11. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 5B, August 9, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	18,400	26,960	25,560	28,840
Bacillariophyta	14,520	25,140	23,320	25,760
Centrales	12,680	23,200	21,860	24,700
Chaetoceros affinis	1,020	1,200	1,420	1,240
C. decipiens	1,260	1,980	1,780	2,360
C. furcellatus	9,460	18,740	17,780	20,180
C. holsaticus	40	-	-	-
C. septentrionalis	280	200	260	100
C. spore	-	-	20	-
C. wighami	160	840	160	460
Cyclotella striata	-	-	-	80
Thalassiosira sp.	160	80	200	20
T. decipiens	280	140	240	260
T. nordenskioeldii	-	20	-	-
T. oestrupii	20	-	-	-
Pennales	1,840	1,940	1,460	1,060
Amphora sp.	20	-	-	20
A. inelegans	-	800	-	-
A. terroris	-	-	-	40
Cocconeis sp.	40	-	-	-
C. pseudomarginata	20	-	-	-
C. scutellum	-	-	20	-
C. scutellum var. *parva*	20	-	-	-

Table 11. (Cont'd.)

Seawater depth (m)	0	5	10	20
Cylindrotheca closterium	20	20	-	-
Cymbella affinis	-	20	-	-
Diploneis smithii	20	-	-	-
Fragilaria sp.	-	-	40	-
F. bicapitata	20	20	-	-
F. intermedia	-	-	-	20
F. pinnata	60	60	80	60
F. striatula	-	40	-	80
Gomphonema augur	-	-	20	-
Grammatophora arctica	-	-	20	-
Navicula ammophila	60	60	40	20
N. amphibola	20	40	-	-
N. cancellata	20	20	-	-
N. cryptocephala	-	-	20	-
N. directa	20	20	-	-
N. directa var. subtilis	-	-	20	-
N. forcipata	20	-	-	-
N. granii	-	-	-	240
N. kariana	-	-	20	-
N. peregrina	20	-	-	-
N. transitans var. derasa	-	20	20	-
Nitzschia acicularis	-	-	20	20
N. cylindrus	40	-	20	-
N. frigida	-	60	-	40
N. frustulum	20	-	-	20

Table 11. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. grunowii	780	700	980	420
N. linearis	-	-	20	-
N. lineata	40	-	80	-
Pinnularia sp.	-	-	-	20
P. quadratarea var. *bicuneata*	-	20	-	-
Pleurosigma sp.	-	20	20	40
Stauroneis quadripedis	580	-	-	-
Synedra pulchella	-	-	20	-
S. tabulata	-	20	-	-
Tabellaria fenestrata	-	-	-	20
Chlorophyta	3,460	1,620	2,100	2,720
Chlamydomonas cyst	1,260	420	-	1,020
C. tetraolaris	2,080	1,120	2,060	1,540
Dunaliella parva	120	80	40	160
Chrysophyta	260	40	80	140
Dinobryon balticum	-	20	-	20
Phaeocystis pouchetii	260	-	80	120
Salpingoeca natans	-	20	-	-
Euglenophyta	-	20	40	-
Euglena schmitzii	-	20	40	-

Table 11. (Cont'd.)

Seawater depth (m)	0	5	10	20
Pyrrophyta	160	140	20	220
Gyrodinium spirale	40	120	-	-
Prorocentrum sp.	20	-	-	20
P. micans	20	-	-	40
P. rampii	80	20	20	160

Table 12. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 5B, August 17, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	12,880	11,060	13,940	10,160
Bacillariophyta	12,660	10,880	13,720	9,900
Centrales	11,680	10,260	12,420	8,580
Chaetoceros affinis	140	200	120	-
C. decipiens	660	580	300	880
C. furcellatus	10,660	9,240	11,840	7,520
C. holsaticus	20	-	-	-
C. septentrionalis	100	80	100	40
C. wighami	60	100	-	-
Thalassiosira decipiens	40	60	60	140
Pennales	980	620	1,300	1,320
Amphora terroris	20	-	-	20
Cocconeis scutellum	20	-	20	-
C. thumensis	-	-	20	-
Cylindrotheca closterium	-	20	-	-
Diploneis sp.	-	-	20	-
D. litoralis	-	-	-	20
D. smithii	-	-	-	20
Eunotia lunaris	-	-	-	20
Fragilaria sp.	20	20	40	-
F. bicapitata	20	20	-	-
F. pinnata	-	20	80	20
Gomphonema sp.	-	-	20	-

Table 12. (Cont'd.)

Seawater depth (m)	0	5	10	20
G. augur	-	-	-	20
Grammatophora angulosa	-	-	20	-
Navicula debilissima	-	20	40	20
N. directa	-	-	-	40
N. glacialis	-	20	-	-
N. grevillei	20	-	-	-
N. peregrina	20	-	-	-
N. rhynchocephala	20	-	-	-
N. transitans	40	-	-	-
Nitzschia cylindrus	-	-	-	300
N. frustulum	-	-	20	-
N. grunowii	780	500	1,020	760
N. seriata	-	-	-	20
Pinnularia sp.	-	-	-	20
Pleurosigma marinum	-	-	-	20
Rhabdonema arcuatum	-	-	-	20
Trachyneis aspera	20	-	-	-
Chlorophyta	80	100	100	160
Chlamydomonas sp.	-	60	40	60
C. ballenyana	80	40	60	80
C. pulsatilla	-	-	-	20

Table 12. (Cont'd.)

Seawater depth (m)	0	5	10	20
Chrysophyta	-	-	-	20
Salpingoeca natans	-	-	-	20
Euglenophyta	20	20	-	20
Euglena acus	-	20	-	-
E. proxima	20	-	-	20
Pyrrophyta	120	60	120	60
Gymnodinium sp.	80	20	40	20
Gyrodinium spirale	40	40	80	40

Table 13. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 5B, August 24, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	16,060	10,100	7,600	8,480
Bacillariophyta	15,660	9,620	7,240	8,060
Centrales	13,140	8,240	6,500	6,760
Chaetoceros affinis	80	80	-	-
C. decipiens	400	420	360	320
C. furcellatus	12,460	7,380	6,000	6,000
C. holsaticus	-	-	-	20
C. septentrionalis	80	80	-	-
C. wighami	60	120	80	280
Thalassiosira decipiens	60	160	60	140
Pennales	2,520	1,380	740	1,300
Achnanthes taeniata	20	-	-	20
Amphora inelegans	40	-	-	-
Cocconeis scutellum	-	-	-	60
C. scuttellum var. parva	-	-	-	20
Cylindrotheca closterium	20	-	-	-
Fragilaria sp.	140	80	-	40
F. bicapitata	20	-	40	-
F. pinnata	120	40	60	40
Gomphonema sp.	-	20	-	40
Navicula debilissima	-	-	20	-
N. directa	-	40	-	20
N. directa var. subtilis	60	-	-	-

Table 13. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. lineola	20	-	-	-
N. peregrina	-	20	-	-
N. rhynchocephala	20	20	-	-
N. transitans var. *derasa*	-	-	-	60
Nitzschia sp.	-	20	20	-
N. acicularis	-	20	-	-
N. cylindrus	20	40	-	80
N. gelida	20	-	-	-
N. grunowii	1,920	1,080	580	840
Pleurosigma sp.	20	-	-	40
P. longum	20	-	-	20
Stenoneis inconspicua var. *baculus*	-	-	20	-
Synedra sp.	20	-	-	-
S. tabulata	-	-	-	20
Trachyneis aspera	40	-	-	-
Chlorophyta	160	200	220	280
Chlamydomonas ballenyana	100	120	60	160
C. pulsatilla	60	80	160	120
Chrysophyta	20	80	-	20
Salpingoeca natans	20	60	-	-
Unidentified	-	20	-	20

Table 13. (Cont'd.)

Seawater depth (m)	0	5	10	20
Euglenophyta	-	-	-	20
Euglena sp.	-	-	-	20
Pyrrophyta	220	160	140	80
Gymnodinium lohmanni	40	40	60	60
Gyrodinium spirale	160	120	80	20
Protoperidinium diabolus	20	-	-	
Unidentified algal cyst	-	40	-	20

Table 14. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 58, August 31, 1976.

Seawater depth (m)	0	1	5	10	20
Total phytoplankton (cells/litre)	1,867,272	1,941,324	1,725,702	4,241,292	4,517,855
Bacillariophyta	1,849,122	1,933,338	1,714,812	4,217,334	4,499,025
Centrales	1,844,040	1,929,708	1,712,634	4,212,252	4,494,990
Biddulphia aurita	726	-	-	-	-
Chaetoceros affinis	23,232	20,328	21,780	31,944	14,795
C. atlanticus	-	726	-	2,178	-
C. decipiens	31,218	12,342	24,684	33,396	8,070
C. furcellatus	1,651,650	1,821,534	1,564,530	4,060,518	4,377,975
C. septentrionalis	2,904	2,178	1,452	5,082	2,690
C. wighami	75,504	22,506	45,012	26,136	13,450
Thalassiosira sp.	16,698	11,616	21,780	18,876	22,865
T. decipiens	40,656	38,478	33,396	34,122	55,145
T. nordenskioeldii	1,452	-	-	-	-
Pennales	5,082	3,630	2,178	5,082	4,035
Achnanthes taeniata	-	726	-	-	-
Amphora inelegans	-	1,452	-	-	-
Cylindrotheca closterium	-	-	-	1,452	-
Fragilaria sp.	726	-	-	2,178	-
Licmophora sp.	-	-	-	726	-
Navicula sp.	-	-	726	-	4,035
N. granii	2,904	-	-	-	-
Nitzschia sp.	-	-	726	-	-
N. cylindrus	726	-	726	726	-

Table 14. (Cont'd.)

Seawater depth (m)	0	1	5	10	20
N. seriata	-	1,452	-	-	-
Trachyneis aspera	726	-	-	-	-
Chlorophyta	7,260	3,630	9,438	15,246	12,105
Ankistrodesmus sp.	726	1,452	726	2,178	-
Chlamydomonas ballenyana	2,904	726	6,534	10,164	10,760
C. pulsatilla	3,630	1,452	2,178	2,904	1,345
Chrysophyta	2,904	726	726	726	-
Phaeocystis pouchetii	2,904	726	726	726	-
Cyanophyta	726	-	-	-	-
Lyngbya putealis	726	-	-	-	-
Euglenophyta	4,356	726	726	1,452	5,380
Euglena sp.	-	-	726	-	-
E. schmitzii	4,356	726	-	1,452	5,380
Pyrrophyta	2,904	2,904	-	6,534	1,345
Goniaulax sp.	-	-	-	1,452	-
G. scrippsae	-	-	-	726	-
Gymnodinium lohmanni	-	726	-	-	1,345
Gyrodinium spirale	726	-	-	2,178	-
Prorocentrum micans	-	726	-	-	-
P. rampii	-	1,452	-	1,452	-
Protoperidinium diabolus	2,178	-	-	726	-

Table 15. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 6, August 10, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	25,500	27,620	33,580	23,060	17,500	12,790
Bacillariophyta	22,440	25,680	30,380	19,700	13,740	8,810
Centrales	20,000	23,720	27,580	15,660	12,260	7,050
Chaetoceros affinis	-	300	1,320	300	720	140
C. borealis	880	-	40	-	-	40
C. decipiens	1,360	1,160	2,380	820	960	220
C. furcellatus	16,660	21,040	22,200	13,220	9,780	5,900
C. holsaticus	20	40	100	40	80	-
C. lauderi	-	-	-	20	-	-
C. septentrionalis	520	440	620	460	220	180
C. spore	-	-	20	20	-	-
C. wighami	-	-	80	40	40	-
Coscinodiscus sp.	-	60	-	40	-	-
C. angustelineatus	40	-	20	-	-	20
Cyclotella striata	-	40	-	-	-	-
Melosira arctica	-	-	40	-	-	-
Thalassiosira sp.	140	20	40	20	40	40
T. decipiens	380	580	560	600	400	440
T. nordenskioeldii	-	20	100	60	-	30
T. oestrupii	-	20	60	20	20	40
Pennales	2,440	1,960	2,800	4,040	1,480	1,760
Achnanthes taeniata	120	-	-	20	-	20
Amphora inelegans var. polita	-	-	-	40	-	-

Table 15. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
A. terroris	40	20	40	-	-	-
Cocconeis scutellum	60	20	40	20	60	40
C. scutellum var. parva	-	-	100	20	20	20
Cymbella affinis	-	-	-	-	-	20
Diploneis litoralis	20	-	-	20	20	-
D. smithii	-	-	-	-	-	-
Fragilaria sp.	60	20	-	40	120	-
F. bicapitata	80	20	60	160	60	80
F. intermedia	20	-	-	40	-	-
F. pinnata	200	140	160	140	80	140
F. striatula	60	80	120	140	60	-
Gomphonema sp.	120	60	140	140	-	20
G. augur	-	-	-	20	-	-
G. exiguum var. pachycladum	20	-	-	20	-	20
Grammatophora sp.	40	-	-	-	-	-
G. arctica	-	-	-	-	-	20
Navicula sp.	60	-	20	20	-	-
N. ammophila	20	-	80	40	-	-
N. cancellata	40	-	40	40	20	20
N. cryptocephala	-	-	180	120	220	220
N. directa var. subtilis	80	20	60	60	20	-
N. grevillei	-	-	20	20	-	-
N. kariana	-	20	-	-	-	-
N. lineola	20	-	-	20	-	-

Table 15. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. peregrina	40	120	-	20	40	40
N. transitans var. *derasa*	40	40	-	20	-	-
N. trigonocephala var. *contracta*	-	-	-	-	-	20
N. valida	-	-	-	20	-	-
Nitzschia sp.	-	-	40	-	-	-
N. acicularis	20	-	20		-	-
N. brebissonii var. *borealis*	-	-	-	20	-	-
N. cylindrus	20	80	20	1,540	-	20
N. frigida	80	-	-	20	-	-
N. frustulum	40	-	20	20	60	-
N. grunowii	940	1240	1,400	1,200	640	820
N. linearis	-	-	20	20	-	-
N. lineata	60	40	120	-	-	40
Opephora martyi	40	-	80	-	-	-
Pinnularia sp.	-	-	20	-	20	-
P. quadratarea	40	-	-	-	-	-
Plagiogramma staurophorum	-	-	-	-	-	20
Pleurosigma sp.	20	-	-	-	-	-
Rhabdonema arcuatum	-	-	-	-	20	120
Synedra sp.	-	40	-	-	-	-
S. pulchella	-	-	-	20	-	20
S. tabulata	40	-	-	-	20	40
Chlorophyta	2,680	1,700	2,440	2,880	3,140	3,320
Chlamydomonas sp.	-	20	-	-	-	-

Table 15. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. ballenyana	20	-	20	-	-	-
C. cysts	-	60	80	1,280	1,440	1,560
C. pulsatilla	-	20	-	-	-	-
C. tetraolaris	2,420	1,480	2,160	1,360	1,640	1,500
Dunaliella parva	220	120	140	240	60	240
Trochiscia multispinosa	-	-	20	-	-	-
Unidentified	20	-	20	-	-	20
Chrysophyta	140	80	340	180	320	420
Dinobryon balticum	-	-	20	20	-	60
Phaeocystis pouchetii	60	60	220	120	200	320
Salpingoeca natans	40	-	80	40	40	20
Unidentified	40	20	20	-	80	20
Euglenophyta	20	-	120	40	60	-
Euglena schmitzii	20	-	80	20	20	-
E. viridis	-	-	40	20	40	-
Pyrrophyta	200	160	300	260	240	200
Glenodinium sp.	-	-	20	-	-	20
Goniaulax sp.	-	-	20	-	20	-
Gymnodinium lohmanni	-	-	20	-	-	-
Gyrodinium spirale	80	-	200	40	120	120
Oxytoxum sp.	20	-	20	-	40	20

Table 15. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Peridinium sp.	20	20	-	20	-	-
P. punctulatum	-	-	-	20	-	-
Prorocentrum sp.	20	-	20	20	-	20
P. micans	20	40	-	40	40	-
P. rampii	40	100	-	100	-	-
Protoperidinium diabolus	-	-	-	20	20	20
Unidentified algal cyst	20	-	-	-	-	40

Table 16. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 7, August 11, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	25,660	68,080	80,900	29,240	24,440	349,206
Bacillariophyta	22,980	64,240	77,380	26,720	22,200	283,140
Centrales	21,580	61,340	73,200	23,820	21,120	227,238
Chaetoceros affinis	2,300	3,260	6,100	2,520	2,600	15,972
C. borealis	60	-	40	-	40	1,452
C. decipiens	2,900	6,600	11,220	3,760	4,900	22,506
C. furcellatus	15,180	50,120	54,320	16,040	12,480	168,432
C. holsaticus	80	100	-	20	-	3,630
C. lauderi	-	-	-	100	-	-
C. septentrionalis	220	320	260	440	200	4,356
C. wighami	400	120	340	260	400	2,178
Coscinodiscus sp.	-	20	20	-	-	-
C. angustelineatus	20	-	-	-	-	-
C. curvatulus	-	-	-	-	20	-
Cyclotella striata	-	-	-	-	-	726
Thalassiosira sp.	40	-	60	80	140	-
T. decipiens	360	780	820	600	320	7,986
T. nordenskioeldii	20	-	-	-	-	-
T. oestrupii	-	20	20	-	20	-
Pennales	1,400	2,900	4,180	2,900	1,080	55,902
Achnanthes taeniata	-	-	-	-	20	-
Amphora sp.	80	-	-	-	-	-
Amphora inelegans var. *polita*	-	-	120	-	-	-

Table 16. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Cocconeis pseudomarginata	-	-	20	-	-	-
C. scutellum	-	20	-	-	120	-
C. scutellum var. parva	60	20	60	40	-	726
C. thumensis	20	-	-	20	-	-
Cylindrotheca closterium	-	-	40	-	-	-
Cymbella affinis	-	-	20	-	-	-
Diploneis litoralis	20	20	-	-	-	-
Fragilaria sp.	140	1,060	620	40	160	1,452
F. bicapitata	40	80	60	-	20	1,452
F. constricta	-	-	20	-	-	-
F. intermedia	-	-	-	40	-	-
F. pinnata	80	40	80	180	100	4,356
F. striatula	20	140	-	-	-	-
Gomphonema sp.	80	20	60	80	-	1,452
G. exiguum var. pachycladum	20	20	-	-	-	726
Grammatophora arctica	-	20	-	-	-	-
Licmophora sp.	-	-	20	-	20	-
L. dalmatica	-	-	40	-	-	-
Navicula sp.	-	-	-	-	40	-
N. ammophila	40	40	60	40	-	2,904
N. cancellata	-	-	-	40	20	2,178
N. crassirostris	-	-	40	-	-	-
N. cryptocephala	80	40	20	-	-	-
N. directa	20	-	-	20	-	-

Table 16. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. directa var. *subtilis*	40	-	40	40	-	-
N. granii	-	-	-	-	-	7,986
N. grevillei	-	20	-	-	-	-
N. peregrina	40	60	-	20	-	2,178
N. scutelloides	-	-	-	-	-	726
Nitzschia acicularis	-	20	-	40	-	
N. angularis var. *kariana*	-	-	-	-	-	726
N. cylindrus	-	-	100	80	80	5,082
N. frigida	40	20	40	-	-	-
N. frustulum	-	60	-	-	20	-
N. grunowii	520	540	460	940	480	23,958
N. linearis	-	-	-	20	-	-
N. lineata	-	320	2,120	1,180	-	-
Opephora martyi	20	20	-	-	-	-
Pinnularia sp.	-	80	40	-	-	-
P. quadratarea	-	-	20	20	-	-
Rhabdonema arcuatum	-	-	-	20	-	-
Synedra sp.	-	-	20	20	-	-
S. pulchella	20	-	-	-	-	-
S. tabulata	20	240	20	20	-	-
Thalassionema nitzschioides	-	-	40	-	-	-
Chlorophyta	2,420	3,600	3,060	2,140	2,000	55,902
Chlamydomonas sp.	20	-	-	-	-	2,904
C. ballenyana	-	-	-	40	20	-

Table 16. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. cyst	1,440	3,000	2,460	1,040	1,440	-
C. tetraolaris	820	420	460	860	480	52,272
Dunaliella parva	140	180	140	200	60	726
Chrysophyta	20	100	220	-	100	3,630
Dinobryon balticum	-	-	40	-	20	1,452
Phaeocystis pouchetii	-	60	160	-	-	1,452
Salpingoeca natans	20	-	-	-	60	
Synura uvella	-	-	-	-	-	726
Unidentified	-	40	20	-	20	-
Euglenophyta	40	20	-	-	-	726
Euglena proxima	-	-	-	-	-	726
E. schmitzii	40	20	-	-	-	-
Pyrrophyta	200	120	240	380	140	5,808
Dinophysis sp.	-	-	-	20	-	-
Glenodinium sp.	20	-	-	20	-	-
Goniaulax sp.	20	-	40	-	-	-
Gymnodinium lohmanni	20	-	-	-	-	-
Gyrodinium spirale	60	40	60	140	140	726
Oxytoxum sp.	40	40	-	40	-	2,178
Peridinium sp.	20	-	20	-	-	-
Prorocentrum sp.	-	-	-	40	-	726

Table 16. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
P. micans	-	-	60	40	-	-
P. rampii	-	20	60	40	-	1,452
Protoperidinium achromaticum	-	-	-	20	-	-
P. diabolum	20	-	-	20	-	726
P. punctulatum	-	20	-	-	-	

Table 17. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station A, August 11, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	15,200	24,260	30,280	19,420	29,500	15,520
Bacillariophyta	11,800	18,720	24,140	14,320	24,060	11,060
Centrales	10,900	17,020	21,860	12,300	22,420	9,920
Chaetoceros affinis	1,480	1,980	1,200	720	1,320	240
C. borealis	-	80	20	-	20	-
C. decipiens	1,060	1,880	1,560	1,340	2,040	700
C. furcellatus	7,860	11,800	17,840	9,260	18,100	8,500
C. holsaticus	60	180	80	120	-	140
C. lauderi	60	-	-	-	-	20
C. septentrionalis	120	180	360	380	340	60
C. spore	-	-	-	-	20	-
C. wighami	60	440	140	-	40	-
Coscinodiscus sp.	-	-	20	20	-	-
Cyclotella striata	-	40	100	-	40	-
Thalassiosira sp.	40	100	60	260	20	60
T. decipiens	160	340	480	200	460	200
T. nordenskioeldii	-	-	-	-	20	-
Pennales	900	1,700	2,280	2,020	1,640	1,140
Achnanthes taeniata	-	20	-	-	-	-
Amphora sp.	-	-	-	20	-	-
Amphora inelegans var. *polita*	20	-	20	40	-	-
A. terroris	-	-	-	-	40	-
Cocconeis scutellum	20	40	20	60	20	60

Table 17. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. scutellum var. parva	-	-	20	-	-	-
C. thumensis	-	-	20	20	-	-
Cylindrotheca closterium	-	-	20	-	-	-
D. litoralis	-	-	20	20	-	-
Eunotia lunaris	-	-	-	-	20	-
Fragilaria sp.	-	20	40	20	20	-
F. bicapitata	20	80	40	40	20	-
F. capucina	-	-	100	-	20	-
F. intermedia	-	20	20	20	-	40
F. pinnata	60	60	80	100	140	-
F. striatula	-	-	-	-	120	20
Gomphonema sp.	-	60	40	100	60	20
G. exiguum var. pachycladum	-	-	-	-	-	20
G. gracile	-	-	20	-	-	-
Licmophora sp.	-	-	-	20	20	-
Navicula sp.	-	20	20	-	-	-
N. ammophila	40	-	60	-	60	-
N. cancellata	40	-	40	80	-	-
N. crassirostris	-	-	60	-	-	-
N. cryptocephala	20	80	240	-	60	60
N. directa	-	20	-	-	-	-
N. directa var. subtilis	-	20	-	-	20	-
N. granii	-	-	-	40	-	-
N. lineola	-	-	-	-	40	-

Table 17. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. lineola	-	-	-	-	40	-
N. peregrina	-	40	-	-	20	-
N. transitans var. *derasa*	-	20	20	-	-	20
Nitzschia acicularis	-	-	-	20	-	40
N. cylindrus	100	60	40	100	-	60
N. frigida	-	-	-	40	40	-
N. frustulum	-	40	-	40	20	-
N. grunowii	500	1,000	1,440	1,220	880	660
N. linearis	80	-	-	20	-	20
N. lineata	-	40	-	-	-	80
Pinnularia quadratarea	-	-	-	-	20	-
Rhabdonema arcuatum	-	20	-	-	-	-
Synedra tabulata	-	40	-	-	-	40
Chlorophyta	2,900	4,900	5,360	4,540	4,420	4,020
Chlamydomonas sp.	20	-	-	20	20	20
C. ballenyana	20	-	20	-	60	-
C. cyst	2,000	3,360	2,080	1,420	1,500	1,660
C. tetraolaris	620	1,300	3,040	2,720	2,480	2,180
Dunaliella parva	220	180	220	360	340	160
Trochiscia multispinosa	-	40	-	20	-	-
Unidentified	20	20	-	-	20	-

Table 17. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chrysophyta	240	280	620	260	600	280
Dinobryon balticum	40	120	160	80	120	100
Phaeocystis pouchetii	100	140	420	160	360	40
Salpingoeca natans	40	-	-	-	20	80
Unidentified	60	20	40	20	100	60
Euglenophyta	40	60	-	120	-	-
Euglena proxima	20	-	-	-	-	-
E. schmitzii	20	60	-	40	-	-
E. viridis	-	-	-	80	-	-
Pyrrophyta	220	300	160	140	400	140
Glenodinium sp.	20	-	-	-	-	-
Goniaulax sp.	20	-	-	-	-	-
Gymnodinium lohmanni	-	-	-	-	40	-
Gyrodinium spirale	20	80	40	80	160	20
Oxytoxum sp.	40	-	20	-	40	-
Prorocentrum sp.	20	60	20	20	-	-
P. micans	60	40	20	-	40	40
P. rampii	-	-	40	20	40	40
Protoperidinium diabolum	40	60	20	20	80	40
Unidentified algal cyst	-	60	-	40	20	20

Table 18. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 9, August 11, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	18,740	30,840	19,940	15,940	14,340	16,520
Bacillariophyta	12,700	22,580	14,400	6,080	12,160	11,380
Centrales	12,080	21,560	13,840	5,340	11,140	10,760
Chaetoceros affinis	1,620	3,400	1,520	560	1,940	1,620
C. borealis	-	-	40	-	-	140
C. decipiens	1,200	3,960	2,220	400	1,540	1,420
C. furcellatus	8,380	13,100	9,360	4,060	7,400	7,300
C. holsaticus	260	60	40	20	-	-
C. lauderi	-	60	40	-	-	-
C. septentrionalis	200	720	340	100	80	200
C. wighami	220	180	200	-	40	-
Coscinodiscus sp.	20	-	-	-	-	-
C. augustelineatus	20	-	-	-	-	20
Cyclotella striata	-	-	-	-	40	-
Thalassiosira sp.	80	-	-	-	-	40
T. decipiens	80	60	80	200	100	20
T. nordenskioeldii	-	20	-	-	-	-
Pennales	620	1,020	560	740	1,020	620
Achnanthes taeniata	-	-	-	20	-	20
Amphora inelegans var. *polita*	-	-	40	-	-	-
Cocconeis scutellum	20	-	-	-	-	-
C. scutellum var. *parva*	-	-	-	-	20	-
Cylindrotheca closterium	20	-	20	-	20	-

Table 18. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Diploneis litoralis	-	-	20	-	-	-
Fragilaria sp.	-	20	-	20	-	-
F. bicapitata	-	-	20	-	40	20
F. intermedia	20	-	-	-	-	-
F. pinnata	20	80	60	20	-	20
F. striatula	-	-	20	-	-	-
Gomphonema sp.	40	20	-	20	-	20
Grammatophora arctica	-	-	-	20	-	-
Licmophora sp.	-	-	20	-	-	-
N. algida	20	-	-	-	-	-
N. ammophila	20	-	-	-	40	-
N. cancellata	-	-	-	-	-	40
N. cryptocephala	-	60	-	40	160	-
N. directa	20	20	20	-	-	-
N. granii	-	60	-	-	-	-
N. peregrina	-	-	20	-	20	-
N. transitans var. derasa	-	-	-	-	20	-
N. valida	-	20	-	-	-	-
Nitzschia acicularis	-	-	-	-	20	20
N. cylindrus	-	60	-	20	20	-
N. frigida	-	-	20	-	40	-
N. grunowii	440	580	160	480	620	460
N. linearis	-	20	-	100	-	20
N. lineata	-	40	140	-	-	-

Table 18. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Synedra tabulata	-	40	-	-	-	-
Chlorophyta	5,140	7,300	4,520	8,200	1,420	4,240
Chlamydomonas sp.	20	20	4,100	80	40	3,260
C. cyst	4,140	6,720	-	7,360	1,100	-
C. tetraolaris	820	320	260	600	60	700
Dunaliella parva	160	240	160	140	200	280
Trochiscia multispinosa	-	-	-	20	20	-
Chrysophyta	540	460	660	1,100	500	560
Dinobryon balticum	420	320	440	860	420	440
D. cylindricum	-	20	60	-	-	-
Phaeocystis pouchetii	60	80	60	180	80	80
Salpingoeca natans	60	20	80	60	-	40
Unidentified	-	20	20	-	-	-
Euglenophyta	60	40	80	140	20	20
Euglena sp.	20	-	-	-	-	-
E. geniculata	-	-	-	-	20	-
E. schmitzii	20	-	40	100	-	20
E. viridis	20	40	40	40	-	-
Pyrrophyta	280	460	240	340	220	220
Dinophysis sp.	20	-	-	-	-	-
Glenodinium sp.	20	-	-	-	20	-

Table 18. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Goniaulax sp.	20	20	20	-	-	20
G. tamarensis	-	40	-	-	20	60
Gyrodinium spirale	20	80	20	40	40	20
Oxytoxum sp.	80	40	20	40	80	40
Peridinium sp.	-	-	20	80	-	20
P. minusculum	-	-	-	-	-	20
Polykrikos schwartzii	-	20	-	-	-	-
Prorocentrum sp.	-	100	60	80	20	20
P. micans	60	140	60	40	20	-
P. rampii	40	20	20	60	-	20
Protoperidinium diabolum	20	-	-	-	20	-
P. punctulatum	-	-	20	-	-	-
Unidentified algal cyst	20	-	40	80	20	100

Table 19. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 10, August 11, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	12,740	20,230	24,500	14,400	18,240	19,120
Bacillariophyta	8,040	14,990	18,340	7,580	11,880	16,000
Centrales	7,120	14,410	17,200	6,620	10,780	14,480
Chaetoceros affinis	820	1,400	1,360	840	860	2,080
C. borealis	-	60	40	20	80	-
C. decipiens	760	1,010	1,920	420	1,000	1,480
C. furcellatus	5,160	11,640	13,160	4,960	7,940	9,920
C. holsaticus	40	-	300	60	180	280
C. lauderi	-	-	20	-	-	20
C. septentrionalis	120	240	260	200	180	340
C. wighami	60	-	-	-	240	100
Thalassiosira sp.	20	60	40	20	100	100
T. decipiens	120	-	80	100	200	160
T. nordenskioeldii	20	-	20	-	-	-
Pennales	920	580	1,140	960	1,100	1,520
Amphiprora sp.	-	20	-	-	-	-
Amphora inelegans var. *polita*	-	-	-	-	40	-
A. terroris	-	-	-	-	80	-
Cocconeis californica	20	-	-	20	-	-
C. pseudomarginata	-	20	-	-	-	-
C. scutellum	-	20	20	-	-	-
Cylindrotheca closterium	40	-	20	-	40	40
Cymbella affinis	-	-	40	-	-	-

Table 19. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Diploneis litoralis	-	-	-	-	20	-
Fragilaria bicapitata	-	-	40	40	-	20
F. intermedia	-	-	20	-	-	-
F. pinnata	40	40	20	40	40	60
F. striatula	-	-	-	20	40	20
Gomphonema sp.	20	-	-	-	-	-
G. augur	-	-	-	-	-	20
G. gracile	-	-	-	40	-	-
Navicula sp.	20	-	-	-	-	-
N. cancellata	-	20	40	-	-	-
N. cryptocephala	-	20	100	40	20	-
N. directa	-	-	-	-	20	20
N. directa var. subtilis	-	-	-	-	20	-
N. granii	20	-	-	-	-	-
N. peregrina	-	-	20	-	-	20
Nitzschia acicularis	-	-	20	40	-	60
N. cylindrus	-	40	-	20	-	40
N. frigida	-	-	20	-	20	-
N. frustulum	-	-	-	-	40	20
N. grunowii	760	380	780	700	720	1,180
N. linearis	-	-	-	-	-	20
Pleurosigma sp.	-	20	-	-	-	-
Chlorophyta	4,380	4,620	5,200	5,900	5,480	2,440
Chlamydomonas sp.	-	20	-	20	20	20

Table 19. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. ballenyana	-	-	20	40	20	-
C. cyst	2,920	4,260	4,300	4,560	4,540	1,560
C. tetraolaris	1,220	240	680	1,060	680	580
Dunaliella parva	220	100	200	200	200	220
Trochiscia multispinosa	20	-	-	20	20	60
Chrysophyta	280	280	480	500	600	380
Dinobryon balticum	240	180	280	320	420	280
Phaeocystis pouchetii	40	-	120	60	100	80
Salpingoeca natans	-	40	20	100	20	20
Unidentified	-	60	60	20	60	-
Euglenophyta	-	-	-	20	80	20
Euglena proxima	-	-	-	20	20	-
E. schmitzii	-	-	-	-	60	20
Pyrrophyta	20	280	340	340	180	160
Goniaulax scrippsae	-	-	20	-	-	-
G. tamarensis	-	-	40	20	-	-
Gymnodinium lohmanni	-	-	20	-	-	-
Gyrodinium spirale	-	20	60	100	40	20
Oxytoxum sp.	-	20	20	20	-	20
Peridinium sp.	-	40	20	-	40	-
P. minusculum	-	40	60	-	-	20

Table 19. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Prorocentrum sp.	-	60	60	80	40	-
P. micans	20	80	20	40	-	20
P. rampii	-	20	20	40	60	20
Protoperidinium diabolum	-	-	-	40	-	60
Unidentified algal cyst	20	60	140	60	20	120

Table 20. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 11, August 11, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	35,360	1,156,518	1,028,016	30,880	15,700	702,768
Bacillariophyta	28,320	944,526	763,752	25,380	11,040	586,608
Centrales	26,620	870,474	710,028	24,220	10,420	535,788
Chaetoceros affinis	3,420	71,874	79,860	3,220	1,160	58,080
C. borealis	40	2,178	726	20	40	-
C. decipiens	4,060	119,790	137,214	2,940	1,140	65,340
C. furcellatus	17,820	634,524	439,956	16,780	7,020	380,424
C. holsaticus	100	7,986	8,712	120	80	1,452
C. lauderi	-	-	2,904	-	-	-
C. septentrionalis	520	19,602	18,876	440	140	8,712
C. wighami	220	4,356	2,178	120	80	-
Cyclotella striata	20	-	-	-	40	-
Ditylum sp.	-	-	726	-	-	-
Thalassiosira	-	-	726	80	20	726
T. decipiens	420	9,438	16,698	500	700	18,876
T. nordenskioeldii	-	-	1,452	-	-	2,178
T. oestrupii	-	726	-	-	-	-
Pennales	1,700	74,052	53,724	1,160	620	50,820
Achnanthes taeniata	-	1,452	-	-	-	1,452
Amphora inelegans var. polita	-	-	1,452	-	-	-
A. terroris	60	-	-	-	-	-
Cocconeis sp.	-	-	-	-	-	2,904
C. californica	-	-	726	-	-	-

Table 20. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. scutellum	-	-	-	20	20	-
C. scutellum var. parva	20	-	-	-	-	-
Cylindrotheca closterium	80	1,452	1,452	20	20	2,178
Diploneis smithii	-	-	-	-	20	-
Fragilaria sp.	-	-	2,904	20	-	-
F. bicapitata	20	726	2,178	40	20	2,178
F. islandica	-	-	-	-	-	2,904
F. pinnata	80	726	1,452	80	40	-
F. striatula	20	-	-	40	60	-
Gomphonema sp.	-	-	2,904	-	-	-
G. exiguum var. pachycladum	-	-	2,178	-	-	-
Gyrosigma fasciola	-	-	-	20	-	-
Licmophora dalmatica	-	-	-	20	-	-
Navicula ammophila	20	726	726	-	-	1,452
N. cryptocephala	20	1,452	-	-	-	-
N. cancellata	-	-	-	20	-	-
N. directa	40	1,452	-	-	-	-
N. directa var. subtilis	20	2,178	726	40	-	-
N. granii	-	31,944	-	40	80	-
N. lineola	20	-	726	-	-	-
N. peregrina	20	-	-	-	-	726
N. valida	-	726	-	-	-	-
Nitzschia acicularis	-	-	-	-	-	726
N. cylindrus	40	726	-	100	-	2,178

Table 20. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. frigida	-	-	1,452	-	20	1,452
N. frustulum	20	-	-	20	-	-
N. grunowii	900	30,492	32,670	640	340	26,136
N. linearis	60	-	-	-	-	1,452
N. lineata	260	-	1,452	20	-	5,082
Pleurosigma marinum	-	-	-	20	-	-
Synedra tabulata	-	-	726	-	-	-
Chlorophyta	5,620	164,076	234,498	4,400	3,860	100,914
Ankistrodesmus falcatus	-	726	-	-	-	-
Chlamydomonas sp.	40	726	1,452	40	-	-
C. ballenyana	40	-	1,452	-	-	-
C. cyst	4,840	128,502	196,746	3,560	3,440	79,860
C. pulsatilla	-	726	726	-	-	-
C. tetraolaris	460	22,506	25,410	540	200	18,150
Dunaliella parva	240	10,164	7,986	220	220	2,178
Trochiscia multispinosa	-	726	726	40	-	726
Chrysophyta	880	29,040	13,794	820	640	9,438
Dinobryon balticum	600	22,506	9,438	640	600	4,356
Phaeocystis pouchetii	80	4,356	1,452	160	40	2,904
Salpingoeca natans	80	726	2,904	20	-	726
Unidentified	120	1,452	-	-	-	726

Table 20. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Euglenophyta	60	1,452	726	40	20	-
Euglena proxima	20	726	726	20	-	-
E. schmitzii	40	726	-	20	20	726
Pyrrophyta	480	7,260	8,712	240	100	4,356
Goniaulax sp.	-	-	-	40	40	
Gymnodinium sp.	20	726	-	-	-	
G. lohmanni	-	726	-		-	
Gyrodinium spirale	140	-	726	80	-	1,452
Oxytoxum sp.	20	-	2,178	-	40	
Peridinium sp.	60	726	-	-	-	
Prorocentrum sp.	20	726	726	-	-	726
P. micans	40	1,452	1,452	80	20	726
P. rampii	100	2,178	2,904	20	-	726
Protoperidinium diabolum	80	726	726	20	-	726
Unidentified algal cyst	-	10,164	6,534	-	40	1,452

Table 21. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 12, August 12, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	31,820	36,560	812,394	13,460
Bacillariophyta	29,600	35,520	763,026	12,320
Centrales	28,720	34,520	726,726	10,520
Chaetoceros affinis	1,400	1,840	78,408	800
C. borealis	200	120	2,904	100
C. decipiens	2,320	3,900	100,188	1,320
C. furcellatus	24,120	27,880	511,830	7,880
C. holsaticus	200	100	2,904	-
C. septentrionalis	260	220	13,068	120
C. wighami	-	40	2,904	40
Coscinodiscus angustelineatus	-	20	-	-
Cyclotella striata	-	40	-	-
Thalassiosira sp.	-	-	1,452	20
T. decipiens	220	360	13,068	180
T. nordenskioeldii	-	-	-	20
T. oestrupii	-	-	-	40
Pennales	880	1,000	36,300	1,800
Amphora inelegans var. *polita*	-	-	-	40
A. terroris	-	-	1,452	-
Cocconeis sp.	20	-	-	20
C. californica	-	-	-	20
C. decipiens	-	-	726	-
C. scutellum	20	-	726	20

Table 21. (Cont'd.)

Seawater depth (m)	0	5	10	20
C. scutellum var. parva	-	20	726	-
C. thumensis	-	20	-	-
Cylindrotheca closterium	-	100	3,630	-
Cymbella affinis	-	-	2,904	-
Fragilaria sp.	-	-	-	140
F. bicapitata	40	60	726	40
F. pinnata	60	140	726	40
F. striatula	-	-	1,452	240
Gomphonema gracile	20	-	726	-
Grammatophora angulosa	20	-	-	-
Licmophora dalmatica	20	-	-	-
Navicula sp.	20	-	-	-
N. ammophila	60	100	-	100
N. debilissima	-	-	726	-
N. directa	-	20	-	40
N. directa var. subtilis	-	-	726	20
N. gastrum	-	-	-	20
N. gelida	-	-	726	40
N. peregrina	20	20	-	40
N. transitans var. derasa	20	-	-	-
Nitzschia acicularis	-	20	1,452	-
N. cylindrus	20	-	1,452	180
N. frigida	-	40	-	-
N. grunowii	380	380	15,972	380

Table 21. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. linearis	20	40	1,452	-
N. lineata	140	40	-	360
Pinnularia sp.	-	-	-	20
Synedra tabulata	-	-	-	40
Chlorophyta	1,880	760	40,656	840
Ankistrodesmus falcatus	20	-	-	-
Chlamydomonas sp.	-	-	726	-
C. ballenyana	-	-	-	20
C. cyst	1,660	380	25,410	-
C. tetraolaris	160	300	11,616	780
Dunaliella parva	40	80	2,904	40
Chrysophyta	240	200	1,452	200
Dinobryon balticum	160	140	726	160
D. cylindricum	-	-	-	20
Phaeocystis pouchetii	40	60	726	20
Salpingoeca natans	20	-	-	-
Unidentified	20	-	-	-
Euglenophyta	-	20	726	-
E. schmitzii	-	20	726	-

Table 21. (Cont'd.)

Seawater depth (m)	0	5	10	20
Pyrrophyta	80	60	5,082	80
Goniaulax catenata	20	-	-	-
G. scrippsae	-	-	-	20
Gyrodinium spirale	-	-	2,178	-
Peridinium minusculum	-	-	-	20
Prorocentrum sp.	40	20	726	-
P. micans	20	20	726	20
P. rampii	-	-	726	-
Protoperidinium diabolum	-	20	726	20
Unidentified	20	-	1,452	20

Table 22. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 13, August 12, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	6,860	10,840	11,940	14,720	11,100	7,420
Bacillariophyta	5,040	9,400	7,920	11,500	9,400	6,480
Centrales	4,720	8,620	7,540	10,460	8,780	6,060
Chaetoceros affinis	360	240	440	640	240	360
C. borealis	-	20	-	80	-	60
C. decipiens	420	540	1,120	1,280	680	660
C. furcellatus	3,560	7,220	5,380	7,540	7,140	4,380
C. holsaticus	20	-	-	20	-	60
C. lauderi	-	-	-	-	120	-
C. septentrionalis	60	40	140	400	120	60
C. wighami	-	120	-			40
Coscinodiscus angustelineatus	-	-	20	-	20	-
Cyclotella striata	20	-	-	-	-	-
Thalassiosira sp.	20	40	60	-	-	-
T. decipiens	200	340	380	480	460	440
T. nordenskioeldii	40	-	-	20	-	-
T. oestrupii	20	60	-	-	-	-
Pennales	320	780	380	1,040	620	420
Achnanthes taeniata	-	-	20	-	-	-
Amphora terroris	-	-	-	-	20	-
Cocconeis sp.	-	20	-	-	-	-
C. scutellum	-	20	-	-	40	-
Cylindrotheca closterium	-	-	-	60	-	20

Table 22. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Cymbella affinis	-	-	-	-	20	20
Diploneis litoralis	-	-	-	40	-	-
D. smithii	-	-	20	-	-	-
Fragilaria sp.	-	80	-	-	-	-
F. bicapitata	40	-	20	20	-	-
F. pinnata	-	-	20	80	-	40
F. striatula	-	60	-	80	-	-
Gomphonema sp.	-	20	-	-	-	-
Navicula ammophila	20	-	-	-	-	40
N. cancellata	-	-	20	-	20	-
N. directa	-	-	20	40	-	-
N. peregrina	-	-	-	20	20	-
N. transitans	-	-	-	20	-	-
Nitzschia acicularis	-	-	-	-	20	-
N. angularis var. kariana	-	-	-	-	-	20
N. cylindrus	-	-	80	100	-	-
N. frigida	20	-	-	200	40	-
N. frustulum	-	40	20	20	-	-
N. gelida	-	20	-	-	-	-
N. grunowii	240	300	160	340	320	240
N. linearis	-	-	-	20	-	-
N. lineata	-	200	-	-	100	40
Synedra tabulata	-	20	-	-	-	-
Thalassiothrix frauenfeldii	-	-	-	-	20	-

Table 22. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chlorophyta	1,520	1,200	3,480	2,900	1,360	840
Carteria vectensis	-	-	20	-	-	-
Chlamydomonas cyst	1,280	600	3,240	2,580	840	560
C. pulsatilla	-	-	-	-	40	-
C. tetraolaris	200	520	200	260	400	260
Dunaliella parva	20	80	20	60	80	20
Staurastrum megacanthum	20	-	-	-	-	-
Chrysophyta	120	140	300	260	160	60
Dinobryon balticum	80	80	180	100	60	40
Distephanus sp.	-	20	-	-	-	-
D. speculum	-	-	-	-	20	-
Phaeocystis pouchetii	-	40	100	40	40	20
Salpingoeca natans	20	-	20	40	40	-
Unidentified	20	-	-	20	-	-
Euglenophyta	-	-	20	-	20	-
E. schmitzii	-	-	20	-	20	-
Pyrrophyta	180	80	120	60	160	40
Glenodinium sp.	20	-	-	-	-	-
Goniaulax scrippsae	20	-	-	20	20	-
Gyrodinium spirale	20	40	-	-	20	-
Oxytoxum sp.	-	-	40	-	-	-

Table 22. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Peridinium minusculum	-	-	-	-	20	-
Prorocentrum sp.	60	20	20	20	20	20
P. micans	-	-	40	-	80	-
P. rampii	20	20	-	-	-	-
Protoperidinium diabolum	20	-	20	20	-	20
P. punctulatum	20	-	-	-	-	-
Unidentified	-	20	100	-	-	-

Table 23. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 14, August 12, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	11,620	14,980	11,140	15,260	11,500	15,280
Bacillariophyta	9,520	12,000	8,320	12,200	9,500	14,280
Centrales	8,720	11,360	7,700	11,660	8,820	13,520
Chaetoceros affinis	1,240	1,080	880	1,320	1,580	1,440
C. borealis	-	40	40	-	20	40
C. decipiens	1,760	1,700	1,040	2,300	1,480	1,640
C. furcellatus	5,080	8,080	5,340	7,620	5,380	9,500
C. septentrionalis	200	60	100	140	60	60
C. wighami	-	100	140	40	40	120
Cyclotella striata	-	-	-	20	-	-
Thalassiosira sp.	20	-	-	-	-	-
T. decipiens	320	220	140	200	220	620
T. nordenskioeldii	80	80	20	-	40	60
T. oestrupii	20	-	-	20	-	40
Pennales	800	640	620	560	680	760
Achnanthes taeniata	-	20	-	-	-	20
Amphora inelegans var. *polita*	-	-	40	-	60	-
Amphora terroris	-	-	20	-	-	80
Cocconeis scutellum	20	20	-	-	20	-
Cylindrotheca closterium	60	80	120	100	40	-
Cymbella affinis	-	-	40	-	-	60
Diploneis sp.	20	-	-	-	-	-
D. didyma	-	20	-	-	-	20

Table 23. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Fragilaria bicapitata	40	20	-	-	20	40
F. pinnata	-	120	20	40	40	160
F. striatula	20	-	-	20	-	-
Gomphonema sp.	-	-	-	20	-	-
G. augur	-	-	20	-	-	-
G. exiguum var. pachycladum	-	-	40	-	-	-
Gyrosigma fasciola	-	-	-	-	-	20
Licmophora dalmatica	-	-	-	20	-	-
Navicula ammophila	60	-	-	80	-	20
N. cancellata	-	-	-	40	-	-
N. directa	-	60	20	-	-	-
N. granii	-	-	40	-	-	-
N. peregrina	40	-	-	-	-	60
N. transitans	-	20	-	-	-	-
N. transitans var. derasa	-	-	20	-	-	20
Nitzschia acicularis	20	-	20	-	20	-
N. cylindrus	120	80	120	60	340	80
N. distans	-	-	-	-	-	20
N. frigida	40	40	-	20	-	20
N. frustulum	-	-	-	-	-	20
N. grunowii	320	160	100	140	140	120
Pinnularia sp.	-	-	-	20	-	-
Rhabdonema arcuatum	20	-	-	-	-	-
Synedra tabulata	20	-	-	-	-	-

Table 23. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chlorophyta	1,820	2,340	2,360	2,420	1,400	780
Chlamydomonas ballenyana	-	80	-	-	-	20
C. cyst	1,200	1,860	2,180	2,100	920	580
C. pulsatilla	-	-	20	40	-	40
C. tetraolaris	400	180	120	80	380	140
Dunaliella parva	200	220	40	140	100	-
Unidentified	20	-	-	60	-	-
Chrysophyta	180	360	240	420	420	20
Dinobryon balticum	40	140	160	120	120	-
Distephanus sp.	20		-	-	-	-
Phaeocystis pouchetii	40	160	60	100	140	20
Salpingoeca natans	40	20	-	100	20	-
Unidentified	40	40	20	100	140	-
Euglenophyta	-	60	40	20	60	-
Euglena geniculata	-	40	-	20	20	-
E. proxima	-	-	20	-	-	-
E. schmitzii	-	20	20	-	20	-
E. viridis	-	-	-	-	20	-
Pyrrophyta	100	200	180	180	120	200
Goniaulax sp.	-	-	-	-	20	-
G. scrippsae	-	-	-	20	-	-

Table 23. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Gymnodinium lohmanni	-	80	40	-	-	-
Gyrodinium spirale	60	-	20	20	20	40
Peridinium sp.	-	-	20	20	-	20
P. minusculum	-	-	-	-	-	20
Prorocentrum sp.	20	100	80	80	20	60
P. micans	-	-	-	-	40	40
P. rampii	20	20	20	40	20	20
Unidentified	-	20	-	-	-	-

Table 24. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 15, August 12, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	13,140	15,680	25,800	28,940	17,580	11,920
Bacillariophyta	11,420	13,680	22,400	27,660	16,220	10,980
Centrales	10,220	12,360	17,620	25,700	14,440	6,380
Biddulphia aurita	20	-	-	-	-	-
Chaetoceros sp.	60	-	-	-	-	-
C. affinis	760	1,760	320	1,700	1,100	40
C. borealis	-	-	60	160	-	-
C. decipiens	1,360	560	720	1,460	580	260
C. diadema	-	-	100	-	-	120
C. furcellatus	7,180	8,420	13,020	19,940	11,060	3,760
C. septentrionalis	140	100	300	400	160	-
C. wighami	-	240	220	180	340	-
Leptocylindrus danicus	-	80	100	240	-	-
Thalassiosira sp.	200	480	320	180	-	20
T. decipiens	480	720	2,460	1,440	1,200	2,180
T. nordenskioeldii	20	-				
Pennales	1,200	1,320	4,760	1,960	1,780	4,600
Achnanthes groenlandica	-	20	-	-	-	-
A. taeniata	-	120	-	-	320	-
Amphora inelegans	-	80	-	-	-	-
A. inelegans var. polita	-	-	-	80	-	-
Cocconeis sp.	20	-	-	-	-	-
C. californica	-	20	-	-	-	-

Table 24. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. scutellum	-	20	-	20	-	-
C. scutellum var. parva	-	-	-	40	-	-
C. thumensis	-	-	80	20	-	-
Cylindrotheca closterium	40	60	120	100	40	-
Cymbella ventricosa var. semicircularis	20	-	-	-	-	-
Diploneis litoralis	-	20	-	-	20	-
Fragilaria sp.	20	-	80	40	-	180
F. bicapitata	-	-	20	20	40	-
F. pinnata	100	80	120	60	-	-
F. striatula	-	-	-	-	180	-
Gomphonema sp.	60	20	-	20	40	40
G. exiguum var. pachycladum	20	-	20	-	20	-
Grammatophora arctica	-	-	40	40	-	-
Gyrosigma fasciola	20	-	40	60	-	20
Licmophora sp.	-	-	-	-	20	-
Navicula sp.	80	20	20	80	80	-
N. ammophila	20	-	80	80	40	-
N. deblissima	-	-	20	-	-	-
N. directa var. subtilis	-	20	-	-	-	-
N. granii	-	-	-	-	-	2,740
N. grevillei	-	-	20	20	-	20
N. peregrina	20	-	40	-	-	-
N. pygmaea	-	-	20	-	-	-

Table 24. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. rhynchocephala	-	-	-	-	-	20
N. transitans	-	40	40	60	-	-
N. vanhoeffenii	-	-	-	-	180	-
Nitzschia sp.	-	-	-	20	-	-
N. acicularis	-	20	-	-	-	-
N. cylindrus	480	460	1,540	500	460	1,160
N. gelida	20	-	-	-	-	-
N. grunowii	260	240	2,460	600	280	420
N. seriata	-	20	-	-	20	-
Pinnularia sp.	-	20	-	20	-	-
P. quadratarea	-	-	-	20	-	-
Pseudonitzschia delicatissima	20	40	-	40	20	-
Synedra sp.	-	-	-	20	-	-
S. pulchella	-	-	20	-	20	-
Chlorophyta	540	760	1,160	320	480	540
Carteria vectensis	-	60	20	-	20	
Chlamydomonas sp.	420	440	700	220	340	320
C. ballenyana	120	80	-	-	-	20
C. pulsatilla	-	180	440	100	120	200
Chrysophyta	420	220	560	180	320	160
Dinobryon sp.	200	120	220	40	60	20
D. balticum	-	20	-	-	-	-

Table 24. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
D. cylindricum	60	-	80	40	-	20
Distephanus sp.	-	-	-	20	-	-
D. speculum	-	-	20	-	-	-
Phaeocystis pouchetii	20	60	-	20	120	40
Salpingoeca natans	140	20	120	20	120	60
Unidentified	-	-	120	40	20	20
Euglenophyta						
Euglena sp.	60	240	140	140	40	80
E. acus	40	20	40	-	-	-
E. proxima	-	20	40	-	-	20
E. schmitzii	-	100	40	80	40	60
	20	100	20	60	-	-
Pyrrophyta						
Goniaulax sp.	700	780	1,540	640	520	160
G. catenata	60	-	-	-	-	-
G. cyst	-	-	-	20	-	-
G. scrippsae	-	20	-	60	120	-
G. tamarensis	20	-	20	-	20	-
Gymnodinium sp.	20	-	-	-	-	-
G. lohmanni	-	40	200	160	100	40
Gyrodinium spirale	280	320	320	160	40	-
Oxytoxum sp.	100	140	380	80	40	120
Peridinium sp.	-	-	100	20	60	-
	40	-	-	20	40	-

Table 24. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
P. minusculum	-	-	-	20	20	-
Prorocentrum sp.	60	100	120	20	20	-
P. micans	-	-	80	80	60	-
P. rampii	100	60	260	-	-	-
Protoperidinium diabolum	20	100	60	-	-	-

Table 25. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 16, August 13, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	14,940	3,640	3,180	8,260
Bacillariophyta	2,380	1,360	1,420	6,460
Centrales	340	440	1,060	5,760
Chaetoceros sp.	-	20	-	40
C. affinis	-	-	20	700
C. borealis	-	40	-	-
C. decipiens	-	20	60	460
C. furcellatus	300	320	740	3,940
C. septentrionalis	-	-	20	80
C. wighami	-	-	80	140
Coscinosira sp.	20	-	-	-
Ditylum sp.	-	-	-	20
Leptocylindrus danicus	-	-	20	-
Thalassiosira sp.	20	40	-	80
T. decipiens	-	-	120	300
Pennales	2,040	1,020	360	700
Achnanthes taeniata	80	-	-	-
Amphiprora sp.	20	-	-	-
Amphora inelegans	20	-	40	-
A. terroris	20	20	20	-
Cocconeis scutellum	160	100	20	60
C. scutellum var. *parva*	-	20	-	20
C. thumensis	20	-	-	-

Table 25. (Cont'd.)

Seawater depth (m)	0	5	10	20
Cylindrotheca closterium	40	40	40	60
Cymbella sp.	100	-	-	-
C. affinis	-	40	-	-
Diploneis sp.	40	-	-	-
D. bombus	20	-	-	-
D. smithii	-	20	-	-
Fragilaria sp.	-	20	20	100
F. pinnata	400	200	40	40
Gomphonema sp.	40	20	-	40
Gyrosigma attenuatum	-	20	-	-
Navicula sp.	140	40	20	100
N. algida	-	-	20	-
N. ammophila	20	60	20	40
N. crucigeroides	-	-	-	20
N. debilissima	60	-	60	20
N. directa	60	20	-	-
N. directa var. *subtilis*	100	40	-	-
N. grevillei	40	-	-	-
N. recurvata	-	40	-	-
N. rhynchocephala	60	-	-	-
N. transitans var. *derasa*	20	100	-	-
Nitzschia sp.	20	-	-	-
N. cylindrus	60	80	20	140
N. gelida	20	-	-	-

Table 25. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. grunowii	320	80	-	40
N. seriata	-	-	20	-
Pinnularia sp.	140	-	-	-
P. quadratarea	20	-	-	-
Plagiogramma staurophorum	-	40	-	-
Pseudonitzschia delicatissima	-	-	20	-
Synedra sp.	-	-	-	20
S. tabulata	-	20	-	-
Chlorophyta	10,620	1,080	680	760
Carteria vectensis	280	20	80	-
Chlamydomonas sp.	620	700	380	540
C. ballenyana	20	20	80	20
C. pulsatilla	9,680	340	140	200
Cosmarium sp.	20	-	-	-
Chrysophyta	280	240	220	300
Dinobryon sp.	40	80	60	260
D. cylindricum	20	20	20	20
Salpingoeca natans	220	140	140	20
Euglenophyta	1,140	360	200	60
E. acus	20	-	-	-
E. schmitzii	1,120	360	200	60

Table 25. (Cont'd.)

Seawater depth (m)	0	5	10	20
Pyrrophyta	520	600	660	680
Goniaulax catenata	-	20	-	-
Gymnodinium sp.	100	40	60	40
G. lohmanni	60	80	340	200
Gyrodinium spirale	-	160	120	100
Oxytoxum sp.	-	20	-	-
Peridinium fatulipes	20	-	-	-
P. minusculum	-	-	-	80
Prorocentrum sp.	160	100	100	160
P. micans	140	120	40	100
P. rampii	-	40	-	-
Protoperidinium diabolum	40	20	-	-

Table 26. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 17, August 13, 1976.

Seawater depth (m)	0	5	10	20	30
Total phytoplankton (cells/litre)	35,920	666,468	542,322	339,042	639,606
Bacillariophyta	34,880	647,592	519,090	315,084	617,100
Centrales	27,720	530,706	321,618	184,404	433,422
Chaetoceros affinis	740	7,260	4,356	11,616	7,986
C. borealis	220	-	726	1,452	1,452
C. decipiens	1,240	39,204	2,904	10,890	31,944
C. diadema	320	-	5,082	3,630	13,794
C. furcellatus	11,160	235,950	96,558	145,200	211,266
C. septentrionalis	200	1,452	726	2,904	2,178
C. wighami	40	9,438	6,534	6,534	8,712
Coscinodiscus sp.	80	1,452	2,904	2,178	2,904
Cyclotella sp.	-	-	-	-	726
Leptocylindrus danicus	280	-	-	-	-
Thalassiosira sp.	60	-	-	-	-
T. bioculata	-	726	-	3,630	-
T. decipiens	13,380	235,224	201,828	219,978	152,460
Pennales	7,160	116,886	197,472	130,680	183,678
Achnanthes taeniata	80	726	-	2,178	2,178
Amphora terroris	20	726	-	-	-
Cocconeis sp.	-	726	-	-	-
Cylindrotheca closterium	80	1,452	726	1,452	726
Cymbella affinis	-	-	1,452	-	-
Diploneis litoralis	-	726	-	-	-

Table 26. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
D. smithii	20	-	-	-	-
Fragilaria sp.	-	726	726	2,904	1,452
F. bicapitata	20	1,452	5,808	-	-
F. islandica	460	7,260	6,534	1,452	12,342
F. pinnata	40	2,178	726	1,452	726
Gomphonema sp.	20	-	-	-	-
Grammatophora arctica	40	-	726	-	-
Gyrosigma fasciola	100	726	1,452	1,452	-
Licmophora sp.	20	-	1,452	1,452	1,452
Navicula sp.	40	1,452	-	1,452	726
N. ammophila	-	-	726	-	-
N. crucigeroides	20	-	-	-	-
N. debilissima	-	726	-	-	-
N. directa	-	726	-	-	-
N. directa var. subtilis	20	-	2,178	-	-
N. granii	640	29,040	21,780	22,506	68,970
N. grevillei	20	-	726	-	-
N. peregrina	40	726	1,452	-	-
N. pygmaea	-	-	-	-	726
N. transitans	20	-	-	-	-
Nitzschia acicularis	60	-	726	-	726
N. cylindrus	4,160	52,998	87,846	65,340	49,368
N. frustulum	20	-	-	-	-
N. grunowii	1,180	12,342	58,080	28,314	40,656

Table 26. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
N. seriata	40	2,178	4,356	-	3,630
Synedra sp.	-	-	-	726	-
Chlorophyta	400	7,986	9,438	13,068	13,794
Chlamydomonas sp.	340	6,534	6,534	5,808	10,164
C. pulsatilla	60	1,452	1,452	6,534	3,630
Closterium sp.	-	-	1,452	726	-
Chrysophyta	200	4,356	2,904	4,356	1,452
Dinobryon sp.	-	1,452	1,452	2,178	726
D. cylindricum	20	-	-	-	-
Phaeocystis pouchetii	20	-	-	-	726
Salpingoeca natans	140	2,178	1,452	2,178	-
Unidentified	20	726	-	-	-
Euglenophyta	100	726	726	-	726
Euglena acus	-	-	726	-	-
E. proxima	100	-	-	-	-
E. schmitzii	-	726	-	-	726
Pyrrophyta	340	5,808	10,164	6,534	6,534
Goniaulax cyst	20	726	3,630	726	726
G. scrippsae	40	-	-	-	-
Gymnodinium sp.	80	2,904	1,452	726	726

Table 26. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
G. lohmanni	20	726	726	1,452	1,452
Gyrodinium spirale	40	726	2,904	1,452	1,452
Oxytoxum sp.	-	-	-	-	726
Peridinium minusculum	20	-	-	-	-
Prorocentrum sp.	80	726	-	2,178	-
P. micans	40	-	1,452	-	1,452

Table 27. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 18, August 13, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	36,690	58,000	596,046	550,308	781,902	538,692
Bacillariophyta	36,110	56,760	588,060	521,994	751,410	522,720
Centrales	24,930	40,040	453,750	458,832	547,404	381,150
Chaetoceros affinis	660	1,220	7,260	13,068	34,848	3,630
C. decipiens	1,180	1,000	16,698	6,534	12,342	3,630
C. diadema	-	-	2,904	1,452	5,082	6,534
C. furcellatus	7,240	7,240	86,394	82,038	138,666	92,928
C. lauderi	-	-	-	1,452	-	-
C. septentrionalis	60	180	-	1,452	1,452	726
C. wighami	220	-	726	-	-	-
Coscinodiscus sp.	-	-	2,178	726	1,452	-
C. angustelineatus	-	-	-	726	-	
Leptocylindrus danicus	20	160	9,438	1,452	13,068	726
Thalassiosira sp.	20	-	-	-	-	-
T. bioculata	-	-	-	-	4,356	6,534
T. decipiens	15,540	30,240	328,152	349,932	336,138	266,442
Pennales	11,180	16,720	134,310	63,162	204,006	141,570
Achnanthes taeniata	180	160	-	726	-	-
Amphora terroris	-	20	-	-	-	726
A. inelegans	-	-	1,452	-	-	-
Cocconeis scutellum	-	40	-	-	-	726
Cylindrotheca closterium	40	120	2,904	1,452	1,452	726
Cymbella sp.	-	20	-	-	-	-

Table 27. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Fragilaria sp.	40	320	8,712	-	726	4,356
F. bicapitata	-	80	726	-	-	726
F. islandica	160	1,400	-	-	-	3,630
F. pinnata	260	400	2,178	8,712	1,452	2,904
F. striatula	-	40	-	-	-	-
Gomphonema sp.	100	140	3,630	726	2,904	2,178
G. exiguum var. pachycladum	20	-	1,452	-	-	-
Grammatophora arctica	20	-	2,178	-	-	-
Gyrosigma fasciola	20	120	726	1,452	1,452	726
Licmophora sp.	-	-	-	-	2,178	1,452
Navicula sp.	-	480	-	726	1,452	2,178
N. ammophila	-	20	726	-	2,178	726
N. crassirostris	-	-	-	-	726	-
N. cruciqeroides	-	-	-	-	1,452	-
N. debilissima	-	-	1,452	-	-	1,452
N. directa	40	-	-	-	-	-
N. granii	900	2,180	34,122	5,808	87,120	55,176
N. grevillei	20	20	-	-	-	726
N. imperfecta	-	-	-	-	-	726
N. lyra var. atlantica	-	-	726	-	-	-
N. pereqrina	40	-	-	-	-	-
N. rhynchocephala	-	20	-	-	-	-
N. transitans	-	60	1,452	2,904	1,452	-
Nitzschia sp.	20	80	-	-	-	726

Table 27. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. acicularis	-	-	-	2,904	-	726
N. cylindrus	4,820	8,080	52,998	31,218	55,902	50,094
N. grunowii	3,740	2,280	15,246	2,904	39,930	9,438
N. linearis	580	420	-	726	726	-
N. seriata	140	160	2,904	726	1,452	726
Pinnularia sp.	20	40	-	-	-	726
Pleurosigma sp.	-	20	-	-	-	-
Pseudonitzschia delicatissima	-	-	-	1,452	-	-
Synedra sp.	20	-	726	726	1,452	-
Chlorophyta	240	480	3,630	21,780	15,246	6,534
Carteria vectensis	-	-	-	726	726	-
Chlamydomonas sp.	80	-	-	7,260	9,438	5,082
C. ballenyana	-	-	726	-	-	726
C. pulsatilla	160	480	2,904	13,794	5,082	726
Chrysophyta	80	240	2,904	-	7,260	6,534
Phaeocystis pouchetii	-	-	-	-	726	2,178
Salpingoeca natans	60	240	2,904	-	6,534	4,356
Unidentified	20	-	-	-	-	-
Euglenophyta	20	20	726	726	1,452	2,178
Euglena proxima	20	20	726	726	-	726
E. schmitzii	-	-	-	-	1,452	1,452

Table 27. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Pyrrophyta	240	500	726	5,808	6,534	726
Goniaulax cyst	20	60	-	-	1,452	-
G. scrippsae	-	20	-	-	-	-
G. sp.	-	60	-	-	-	-
Gymnodinium sp.	-	40	-	3,630	726	726
G. lohmanni	20	40	726	-	-	-
Gyrodinium spirale	40	60	-	-	1,452	-
Peridinium sp.	-	20	-	-	726	-
Prorocentrum sp.	60	100	-	1,452	1,452	-
P. micans	40	60	-	-	-	-
P. rampii	-	20	-	-	-	-
Protoperidinium diabolum	60	20	-	726	726	-

Table 28. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 19, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	6,500	428,340	486,420	535,788	22,400	11,360
Bacillariophyta	4,620	384,054	450,846	497,310	21,100	10,660
Centrales	3,760	359,370	434,874	474,078	20,340	9,980
Chaetoceros affinis	260	100,188	87,846	78,408	2,300	1,420
C. borealis	20	-	1,452	1,452	60	60
C. decipiens	220	13,068	21,780	5,808	1,180	320
C. diadema	-	-	1,452	-	-	40
C. furcellatus	2,520	232,320	276,606	355,014	15,060	6,640
C. septentrionalis	-	-	6,534	726	60	60
C. wighami	80	-	-	-	-	-
Coscinodiscus sp.	20	-	-	-	-	-
Cyclotella sp.	-	-	-	-	20	-
Leptocylindrus danicus	-	1,452	10,164	9,438	40	40
Thalassiosira sp.	-	-	-	-	220	120
T. bioculata	40	726	3,630	-	20	80
T. decipiens	600	11,616	24,684	23,232	1,380	1,140
T. nordenskioeldii	-	-	726	-	-	60
Pennales	860	24,684	15,972	23,232	760	680
Achnanthes taeniata	100	-	-	-	-	20
Amphora alata	-	-	-	-	40	-
Cocconeis thumensis	-	-	-	-	-	20
Cylindrotheca closterium	100	-	2,178	5,082	80	20
Fragilaria sp.	40	-	-	-	-	20

Table 28. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
F. islandica	-	-	726	-	-	-
F. pinnata	60	726	726	726	20	-
Gomphonema sp.	20	726	-	-	-	-
Grammatophora arctica	-	-	-	726	-	20
Gyrosigma fasciola	20	-	-	-	-	-
Licmophora sp.	-	-	-	-	-	20
Navicula sp.	-	1,452	726	-	-	-
N. directa	-	-	-	726	-	-
N. directa var. subtilis	20	-	-	726	20	-
N. granii	-	-	-	4,356	100	-
N. peregrina	-	-	726	-	40	-
N. recurvata	-	-	-	-	20	-
N. transitans	20	-	726	-	-	-
N. transitans var. derasa	-	-	726	726	-	-
N. trigonocephala	20	-	-	-	-	-
N. valida	20	-	-	-	-	-
Nitzschia acicularis	-	726	2,178	-	-	-
N. cylindrus	240	-	1,452	726	240	200
N. frustulum	-	-	-	-	20	-
N. gelida	-	-	-	-	-	80
N. grunowii	140	3,630	4,356	8,712	120	220
N. seriata	-	726	726	-	20	60
Pinnularia sp.	40	726	726	-	40	-
Synedra sp.	20	-	-	726	-	-

Table 28. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chlorophyta	1,400	15,972	13,794	10,890	560	300
Carteria vectensis	-	4,356	2,904	1,452	60	20
Chlamydomonas sp.	900	2,904	2,904	2,178	280	220
C. ballenyana	140	-	-	1,452	60	-
C. pulsatilla	360	8,712	7,986	5,808	160	60
Chrysophyta	40	16,698	9,438	10,890	180	100
Dinobryon sp.	-	726	-	-	-	-
D. balticum	-	10,164	5,808	8,712	80	-
D. cylindricum	20	1,452	-	1,452	-	-
Phaeocystis pouchetii	20	-	1,452	726	40	80
Salpingoeca natans	-	4,356	1,452	-	20	20
Unidentified	-	-	726	-	40	-
Euglenophyta	120	1,452	726	1,452	40	-
Euglena acus	60	726	-	-	-	-
E. proxima	20	-	-	-	-	-
E. schmitzii	40	726	726	1,452	40	-
Pyrrophyta	320	10,164	11,616	15,246	520	300
Goniaulax sp.	-	-	-	-	-	20
G. scrippsae	80	726	-	726	-	-
Gymnodinium sp.	40	1,452	2,904	2,904	120	160
G. lohmanni	-	3,630	5,808	5,082	280	-

Table 28. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Gyrodinium spirale	20	-	1,452	2,904	20	40
Oxytoxum sp.	-	-	-	-	20	-
Peridinium sp.	40	-	-	-	-	-
P. minusculum	-	-	-	726	-	-
Prorocentrum sp.	40	2,904	1,452	2,178	60	60
P. micans	60	726	-	726	-	20
P. rampii	-	726	-	-	20	-
Protoperidinium diabolum	40	-	-	-	-	-

Table 29. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 20, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	10,660	10,580	15,220	15,980	27,160	23,240
Bacillariophyta	8,820	8,080	13,400	14,200	25,620	22,320
Centrales	8,480	7,480	12,640	13,600	24,920	21,480
Chaetoceros affinis	1,700	1,100	2,140	2,180	4,360	2,000
C. borealis	-	120	80	100	80	40
C. decipiens	280	500	940	620	560	60
C. diadema	-	-	-	60	-	40
C. furcellatus	6,140	5,040	8,880	9,640	18,020	17,760
C. septentrionalis	20	120	60	40	20	100
C. wighami	-	260	-	220	260	140
Coscinodiscus sp.	-	-	-	-	20	-
C. angustelineatus	-	20	-	-	-	-
Leptocylindrus danicus	60	-	40	-	-	-
Melosira sp.	-	-	-	-	40	-
Thalassiosira sp.	-	-	-	-	40	-
T. bioculata	-	-	-	20	-	80
T. decipiens	280	320	500	720	1,520	1,260
Pennales	340	600	760	600	700	840
Achnanthes taeniata	-	100	-	-	40	-
Cocconeis scutellum	-	-	20	20	-	-
C. scutellum var. *parva*	-	-	-	20	-	-
C. thumensis	-	-	-	-	20	20
Cylindrotheca closterium	20	-	20	20	20	20

Table 29. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Fragilaria sp.	20	20	-	-	-	-
F. bicapitata	-	-	-	-	-	20
F. pinnata	20	20	-	20	100	-
F. striatula	-	120	-	60	-	-
Gomphonema sp.	-	-	20	20	20	-
Grammatophora arctica	-	20	-	-	20	-
Licmophora sp.	-	-	-	-	20	-
Navicula crassirostris	-	20	-	-	-	-
N. debilissima	-	-	-	40	-	-
N. grevillei	-	-	-	20	20	-
N. peregrina	20	20	-	40	-	-
N. transitans	-	-	-	-	-	40
N. trigonocephala	-	-	-	-	20	-
N. vanhoeffenii	-	-	-	-	40	-
Nitzschia acicularis	-	-	-	60	-	-
N. cylindrus	220	20	580	80	260	280
N. frustulum	-	-	20	-	-	-
N. grunowii	40	120	100	180	240	340
N. seriata	-	-	-	20	80	100
Pinnularia quadratarea var. *densestriata*	-	-	-	-	-	20
Stauroneis septentrionalis	-	140	-	-	-	-
Chlorophyta	260	320	360	400	420	280
Carteria vectensis	-	-	80	20	140	20

Table 29. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chlamydomonas sp.	140	160	140	240	220	80
C. pulsatilla	120	160	140	140	60	180
Chrysophyta	900	1,040	960	800	460	160
Dinobryon sp.	-	-	-	-	-	20
D. balticum	780	840	860	640	400	140
D. cylindricum	60	120	60	100	40	-
Phaeocystis pouchetii	60	20	-	20	-	-
Salpingoeca natans	-	40	20	40	-	-
Unidentified	-	20	20	-	20	-
Euglenophyta	-			60	40	40
Euglena acus	-	-	-	20	-	-
E. proxima	-	-	-	-	40	40
E. schmitzii	-	-	-	40	-	-
Pyrrophyta	680	1,140	500	520	620	440
Dinophysis acuminata	-	-	20	-	-	-
Goniaulax sp.	20	20	-	-	-	-
G. cyst	-	-	40	-	-	-
G. scrippsae	20	60	20	20	-	-
Gymnodinium sp.	100	120	100	120	200	120
G. lohmanni	280	660	220	240	200	120
Gyrodinium spirale	80	100	20	40	-	100

Table 29. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Oxytoxum sp.	20	40	-	-	-	-
Peridinium fatulipes	60	-	-	20	-	-
Prorocentrum sp.	40	40	40	40	100	20
P. micans	40	100	40	40	80	40
P. rampii	20	-	-	-	-	-
Protoperidinium diabolum	-	-	-	-	40	40

Table 30. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 21, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	18,360	17,580	6,060	4,160	6,240	7,660
Bacillariophyta	16,000	14,840	5,040	3,200	5,140	6,800
Centrales	12,720	14,600	4,760	2,900	4,780	6,620
Chaetoceros sp.	-	40	-	-	-	-
C. affinis	1,940	1,640	900	560	200	880
C. borealis	80	-	20	20	-	-
C. decipiens	500	120	80	40	-	80
C. diadema	-	-	60	-	-	40
C. furcellatus	8,740	11,420	3,060	1,720	4,300	5,440
C. septentrionalis	-	40	-	-	-	-
C. wighami	780	320	140	200	-	-
Leptocylindrus danicus	-	-	-	-	20	-
Thalassiosira sp.	20	-	-	-	-	-
T. bioculata	-	20	-	-	-	-
T. decipiens	640	980	500	360	260	180
T. nordenskioeldii	20	20	-	-	-	-
Pennales	3,280	240	280	300	360	180
Achnanthes taeniata	880	-	-	-	100	-
Cocconeis scutellum	-	-	-	-	20	-
Cylindrotheca closterium	40	-	20	-	-	-
Gomphonema sp.	40	-	-	20	-	-
Navicula sp.	20	-	-	20	20	-
N. cruciferoides	-	20	-	-	-	-

Table 30. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. granii	2,240	-	-	-	-	-
N. imperfecta	-	-	-	-	-	20
N. peregrina	-	-	-	-	40	80
N. valida	20	-	-	-	-	-
Nitzschia cylindrus	-	200	60	-	40	-
N. frustulum	-	-	-	-	-	20
N. grunowii	40	20	180	260	100	40
N. linearis	-	-	-	-	40	20
N. seriata	-	-	20	-	-	-
Chlorophyta	240	240	240	280	540	300
Carteria vectensis	20	-	-	-	40	-
Chlamydomonas sp.	120	140	120	120	300	160
C. pulsatilla	100	100	120	160	200	120
Cosmarium sp.	-	-	-	-	-	20
Chrysophyta	920	1,620	340	100	40	160
Dinobryon balticum	720	1,160	280	20	20	80
D. cylindricum	160	380	60	-	-	-
Phaeocystis pouchetii	20	40	-	40	-	-
Salpingoeca natans	-	-	-	20	20	20
Unidentified	20	40	-	20	-	60

Table 30. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Euglenophyta	80	40	40	80	100	80
Euglena acus	40	20	20	-	20	20
E. proxima	20	20	-	20	-	-
E. schmitzii	20	-	20	60	80	60
Pyrrophyta	1,120	840	400	500	420	320
Goniaulax cyst	-	-	20	-	-	-
G. scrippsae	140	60	-	-	20	-
Gymnodinium sp.	240	80	20	240	180	120
G. lohmanni	480	380	300	160	60	40
Gyrodinium spirale	100	120	40	100	160	140
Peridinium fatulipes	-	20	-	-	-	-
Prorocentrum sp.	80	100	-	-	-	-
P. micans	60	80	-	-	-	-
Protoperidinium diabolum	20	-	20	-	20	40

Table 31. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 22, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	27,800	23,900	23,040	600,388	12,240	10,260
Bacillariophyta	26,100	22,840	22,020	590,238	11,800	9,580
Centrales	25,320	22,320	21,780	573,540	11,680	9,260
Chaetoceros affinis	1,940	1,620	9,180	36,300	1,880	1,460
C. borealis	-	40	-	3,630	640	-
C. decipiens	60	280	60	4,356	-	480
C. diadema	-	-	-	-	60	-
C. furcellatus	23,060	20,220	12,380	521,268	8,680	7,020
C. septentrionalis	60	100	60	-	80	20
C. wighami	100	-	-	7,986	160	80
Coscinodiscus angustelineatus	20	-	-	-	-	-
Leptocylindrus danicus	20	-	20	-	-	-
Thalassiosira sp.	-	-	-	-	20	-
T. decipiens	60	60	80	-	160	200
Pennales	780	520	240	16,698	120	320
Achnanthes taeniata	20	20	20	-	-	20
Amphora terroris	-	20	-	-	-	-
Cocconeis scutellum var. parva	-	-	-	-	-	20
Cylindrotheca closterium	160	120	120	1,452	20	60
Eunotia lunaris	-	20	-	-	-	-
Fragilaria sp.	-	-	-	-	-	20
Gomphonema sp.	-	-	-	-	20	-
Grammatophora arctica	-	-	-	-	20	-

Table 31. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Gyrosigma fasciola	-	-	20	726	20	-
Navicula sp.	20	20	-	-	40	-
N. ammophila	-	-	-	-	-	20
N. directa var. *subtilis*	20	-	-	-	-	-
N. peregrina	-	20	-	726	-	-
Nitzschia acicularis	120	-	20	-	-	-
N. cylindrus	340	180	40	11,616	-	-
N. gelida	20	-	-	-	-	-
N. grunowii	80	80	20	2,178	-	160
N. linearis	-	40	-	-	-	-
N. seriata	-	-	-	-	-	20
Chlorophyta	300	240	120	4,356	240	300
Carteria vectensis	100	-	-	-	60	-
Chlamydomonas sp.	120	100	20	2,178	160	180
C. ballenyana	20	-	-	-	-	-
C. pulsatilla	60	140	100	2,178	20	120
Chrysophyta	820	500	660	5,808	40	100
Dinobryon sp.	20	-	-	-	-	-
D. balticum	720	420	620	4,356	-	80
D. cylindricum	20	80	40	726	-	20
Salpingoeca natans	40	-	-	726	20	-
Unidentified	20	-	-	-	20	-

Table 31. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Euglenophyta	-	-	-	726	20	-
Euglena acus	-	-	-	726	-	-
E. schmitzii	-	-	-	-	20	-
Pyrrophyta	580	320	240	7,260	140	280
Goniaulax cyst	20	-	-	-	-	40
G. scrippsae	20	-	20	-	-	-
Gymnodinium sp.	40	-	40	1,452	20	80
G. lohmanni	220	260	60	2,904	40	60
Gyrodinium spirale	80	-	-	2,178	60	40
Oxytoxum sp.	60	-	-	-	20	20
Peridinium fatulipes	40	-	-	-	-	-
Prorocentrum sp.	60	-	40	726	-	-
P. micans	-	40	80	-	-	-
P. rampii	40	20	-	-	-	40

Table 32. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 23, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	6,560	11,440	9,000	16,000	10,520	11,860
Bacillariophyta	4,180	10,120	6,760	13,940	8,600	10,840
Centrales	4,160	10,020	6,700	13,780	8,380	10,540
Chaetoceros affinis	380	840	420	840	1,060	2,320
C. borealis	-	-	-	-	40	40
C. decipiens	100	320	220	140	220	160
C. diadema	60	40	-	80	40	40
C. furcellatus	3,360	8,580	5,680	12,160	6,860	7,420
C. septentrionalis	20	-	40	-	-	40
C. wighami	-	100	140	-	-	260
Coscinodiscus sp.	-	-	-	-	20	-
Leptocylindrus danicus	-	20	-	40	-	60
Thalassiosira bioculata	20	-	-	-	-	-
T. decipiens	220	120	200	520	140	200
Pennales	20	100	60	160	220	300
Cylindrotheca closterium	-	40	-	40	60	100
Diploneis litoralis	-	-	20	-	-	-
Fragilaria sp.	-	-	-	20	-	-
Nitzschia cylindrus	-	-	-	80	-	60
N. delida	20	-	20	-	-	-
N. grunowii	-	40	20	-	160	140
N. seriata	-	20	-	-	-	-
Pinnularia quadratarea var. *bicuneata*	-	-	-	20	-	-

Table 32. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chlorophyta	580	340	460	400	540	360
Carteria vectensis	160	20	20	20	140	100
Chlamydomonas sp.	300	180	220	180	220	140
C. ballenyana	-	-	-	20	60	20
C. pulsatilla	120	140	220	180	120	100
Chrysophyta	1,300	620	1,140	1,000	560	80
Dinobryon sp.	20	-	-	-	-	-
D. balticum	1,260	560	1,120	860	440	20
D. cylindricum	-	20	20	80	80	20
Salpingoeca natans	20	-	-	40	20	-
Unidentified	-	40	-	20	20	40
Euglenophyta	-	20	-	40	20	80
Euglena sp.	-	-	-	-	20	-
E. acus	-	-	-	40	-	20
E. proxima	-	20	-	-	-	60
Pyrrophyta	480	320	640	620	740	480
Goniaulax cyst	-	-	-	20	40	20
G. scrippsae	20	-	20	-	40	-
Gymnodinium sp.	60	160	220	200	100	100
G. lohmanni	240	60	180	180	480	180
Gyrodinium sp.	40	20	-	60	-	-

Table 32. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
G. spirale	100	20	140	100	20	80
Oxytoxum sp.	-	20	20	-	20	20
Peridinium sp.	-	-	-	20	-	-
P. fatulipes	-	20	-	-	20	-
Prorocentrum sp.	-	-	40	-	-	60
P. rampii	20	20	20	-	-	20
Protoperidinium diabolum	-	-	-	40	20	-
Unidentified algal cyst	20	20	-	-	60	20

Table 33. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 24, August 14, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	12,840	13,440	12,080	855,228	472,626	13,480
Bacillariophyta	10,720	11,480	11,160	832,722	447,942	13,180
Centrales	10,400	11,300	10,740	825,462	434,874	12,820
Chaetoceros affinis	1,420	1,440	1,300	26,862	29,040	460
C. borealis	-	200	20	-	-	40
C. decipiens	280	540	320	13,068	5,808	220
C. furcellatus	8,320	8,700	8,840	775,368	384,780	11,820
C. septentrionalis	20	120	-	4,356	5,082	60
C. wighami	200	200	40	3,630	7,260	60
Coscinodiscus sp.	-	20	20	-	726	-
C. angustelineatus	20	-	-	-	-	-
Leptocylindrus danicus	140	40	100	2,178	-	-
Thalassiosira decipiens	-	40	100	-	2,178	160
Pennales	320	180	420	7,260	13,068	360
Achnanthes taeniata	-	-	20	-	-	-
Cylindrotheca closterium	20	-	40	-	726	60
Fragilaria bicapitata	-	-	20	726	-	-
F. pinnata	-	-	-	726	726	-
F. striatula	-	-	40	-	-	-
Gomphonema sp.	-	-	20	-	-	20
Grammatophora arctica	20	-	20	-	-	-
Gyrosigma fasciola	-	-	-	-	726	-
Navicula sp.	20	20	-	-	-	60

Table 33. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. directa	20	-	-	1,452	-	-
N. forcipata	-	-	-	-	726	-
N. granii	-	-	-	-	-	20
N. peregrina	20	-	20	-	-	-
N. transitans var. *derasa*	-	20	-	-	-	-
Nitzschia sp.	-	-	-	-	726	-
N. cylindrus	-	20	-	726	-	20
N. grunowii	220	120	200	3,630	9,438	180
Synedra sp.	-	-	40	-	-	-
Chlorophyta	400	280	240	10,164	13,068	140
Carteria vectensis	80	60	60	3,630	1,452	40
Chlamydomonas sp.	260	120	60	2,904	6,534	40
C. ballenyana	-	-	-	-	726	
C. pulsatilla	60	100	120	2,904	4,356	60
Cosmarium sp.	-	-	-	726	-	
Chrysophyta	1,080	960	280	7,260	5,808	-
Dinobryon balticum	920	700	220	3,630	-	-
D. cylindricum	160	260	60	-	-	-
Salpingoeca natans	-	-	-	2,178	4,356	-
Unidentified	-	-	-	1,452	1,452	-

Table 33. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Euglenophyta	-	-	-	726	726	40
Euglena acus	-	-	-	726	-	-
E. schmitzii	-	-	-	-	726	40
Pyrrophyta	640	720	400	4,356	5,082	120
Goniaulax cyst	-	40	-	-	-	-
G. scrippsae	20	20	20	-	726	20
Gymnodinium sp.	60	100	80	1,452	726	60
G. lohmanni	440	380	160	726	-	-
Gyrodinium sp.	20	20	-	-	-	-
G. spirale	60	120	60	2,178	1,452	20
Prorocentrum sp.	40	40	80	-	2,178	20

Table 34. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 25, August 15, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	8,830	12,640	14,120	12,700	4,100	5,060
Bacillariophyta	8,510	12,060	13,460	11,800	3,620	4,420
Centrales	3,380	11,660	12,940	10,540	3,280	4,000
Chaetoceros affinis	-	-	60	-	120	-
C. borealis	-	-	-	-	40	40
C. decipiens	180	140	80	80	80	-
C. furcellatus	3,020	11,440	12,720	10,300	2,880	3,820
C. septentrionalis	20	80	20	80	20	60
C. wighami	60	-	-	-	-	-
Thalassiosira decipiens	100	-	60	80	140	80
Pennales	5,130	400	520	1,260	340	420
Amphora terroris	-	-	-	-	-	20
Asterionella formosa	3,630	-	120	-	-	-
Cocconeis scutellum	-	40	-	20	-	-
C. thumensis	20	-	20	-	-	-
Cylindrotheca closterium	20	-	-	-	-	-
Diploneis smithii	-	20	-	-	-	-
Fragilaria sp.	80	-	-	20	20	-
F. pinnata	-	-	20	100	60	20
Gomphonema sp.	20	-	-	20	20	-
Licmophora sp.	40	-	-	-	-	-
Navicula sp.	180	20	-	-	-	-
N. ammophila	20	-	-	-	-	-

Table 34. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. deblissima	60	-	-	-	-	-
N. directa	20	-	-	-	-	-
N. directa var. *subtilis*	-	20	-	-	-	20
N. recurvata	40	-	-	-	-	-
N. transitans	-	20	-	-	-	-
N. transitans var. *derasa*	-	-	-	20	-	-
Nedium affinis	-	-	-	20	-	-
Nitzschia sp.	80	-	-	-	-	40
N. acicularis	60	-	-	-	-	-
N. cylindrus	160	-	40	-	-	20
N. grunowii	480	260	320	1,040	240	300
N. linearis	-	20	-	-	-	-
Synedra sp.	160	-	-	-	-	-
S. pulchella	60	-	-	-	-	-
Trachyneis aspera	-	-	-	20	-	-
Chlorophyta	220	220	260	360	160	320
Chlamydomonas sp.	100	200	100	220	80	140
C. ballenyana	-	-	20	-	-	120
C. pulsatilla	120	20	140	140	80	60
Chrysophyta	-	240	240	140	120	20
Dinobryon sp.	-	40	100	-	-	-
D. cylindricum	-	20	-	-	-	-

Table 34. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Salpingoeca natans	-	20	20	40	20	20
Unidentified	-	160	120	100	100	-
Euglenophyta	40	-	40	60	20	20
Euglena sp.	-	-	-	20	-	-
E. proxima	40	-	20	-	-	-
E. schmitzii	-	-	20	40	20	20
Pyrrophyta	60	120	120	340	180	280
Goniaulax cyst	-	-	-	20	-	-
G. scrippsae	20	-	-	-	-	-
Gymnodinium sp.	-	-	-	40	80	80
G. lohmanni	-	20	20	60	-	80
Gyrodinium spirale	-	80	100	200	100	120
Oxytoxum sp.	20	-	-	-	-	-
Prorocentrum micans	20	-	-	-	-	-
Protoperidinium diabolum	-	20	-	20	-	-

Table 35. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 26, August 15, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	31,940	586,608	18,780	586,608	19,160	607,662
Bacillariophyta	30,160	558,294	18,160	561,198	18,400	588,060
Centrales	29,580	540,144	17,460	552,486	17,860	572,814
Chaetoceros affinis	860	14,520	1,020	37,752	480	25,410
C. borealis	-	-	60	2,904	40	-
C. decipiens	500	15,246	1,300	31,218	1,220	23,232
C. diadema	-	5,808	-	-	-	-
C. furcellatus	27,940	499,488	14,720	466,092	15,840	521,268
C. septentrionalis	80	2,904	120	4,356	60	1,452
C. wighami	-	-	-	5,808	20	-
Thalassiosira decipiens	200	2,178	240	4,356	200	1,452
Pennales	580	18,150	700	8,712	540	15,246
Achnanthes taeniata	40	-	-	-	-	2,904
Cocconeis thumensis	-	-	20	-	-	-
Cylindrotheca closterium	-	-	20	-	20	726
Fragilaria bicapitata	-	1,452	20	-	-	-
F. pinnata	60	-	-	-	20	-
Gomophonema exiguum var. pachycladum	-	-	-	-	20	-
Grammatophora arctica	-	-	20	-	-	-
Navicula sp.	-	-	-	726	20	-
N. deblissima	-	-	-	-	20	-
N. directa var. subtilis	-	726	-	-	-	-
N. forcipata	-	-	20	-	-	-

Table 35. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. peregrina	60	-	-	-	20	726
N. transitans	-	-	-	726	-	-
N. trigonocephala	-	-	-	726	-	-
Nedium affinis	-	-	-	-	-	726
Nitzschia cylindrus	80	1,452	80	-	-	-
N. grunowii	220	14,520	520	6,534	400	10,164
N. linearis	120	-	-	-	-	-
Synedra sp.	-	-	-	-	20	-
Chlorophyta	160	9,438	220	6,534	280	11,616
Carteria vectensis	20	726	60	1,452	60	-
Chlamydomonas sp.	40	1,452	20	3,630	140	-
C. ballenyana	20	726	-	726	-	-
C. pulsatilla	80	6,534	140	726	80	11,616
Chrysophyta	700	11,616	60	6,534	80	3,630
Dinobryon sp.	20	-	-	-	-	-
D. balticum sp.	500	8,712	20	4,356	20	1,452
D. cylindricum	120	2,178	-	1,452	20	-
Salpingoeca natans	20	-	40	726	40	2,178
Unidentified	40	726	-	-	-	-
Euglenophyta	-	1,452	-	-	40	1,452
Euglena sp.	-	1,452	-	-	-	726

Table 35. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
E. acus	-	-	-	-	20	-
E. schmitzii	-	-	-	-	20	726
Pyrrophyta	920	5,808	340	12,342	360	2,904
Goniaulax scrippsae	-	726	40	726	-	-
Gymnodinium sp.	180	2,178	100	2,178	100	-
G. lohmanni	440	726	180	7,986	140	726
Gyrodinium spirale	20	-	-	-	40	726
Oxytoxum sp.	-	-	-	726	-	-
Peridinium sp.	80	-	-	726	-	-
P. fatulipes	-	-	-	-	-	726
Prorocentrum sp.	40	-	-	-	-	-
P. rampii	-	-	-	-	-	726
Protoperidinium diabolum	160	2,178	20	-	80	-

Table 36. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 27, August 15, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	582,978	4,380	14,740	12,300	15,360	10,240
Bacillariophyta	561,198	3,620	14,120	11,320	14,520	9,580
Centrales	540,870	2,740	13,680	10,920	14,080	8,860
Chaetoceros affinis	23,958	520	1,760	780	820	200
C. borealis	-	40	-	20	-	20
C. decipiens	2,178	260	180	140	540	100
C. furcellatus	511,830	1,640	11,400	9,780	12,320	8,340
C. septentrionalis	1,452	100	120	20	40	80
C. wighami	1,452	100	160	60	260	-
Thalassiosira sp.	-	-	-	-	-	20
T. decipiens	-	80	60	120	100	100
Pennales	20,328	880	440	400	440	720
Achnanthes taeniata	-	-	-	-	-	20
Cylindrotheca closterium	726	40	-	20	-	-
Cymbella affinis	-	20	-	-	-	-
Fragilaria sp.	-	20	-	-	-	20
F. pinnata	-	20	-	-	-	20
Gomphonema sp.	726	-	-	-	-	-
Licmophora sp.	726	-	-	-	-	-
Navicula debilissima	726	-	-	-	-	-
N. directa	-	-	20	-	-	-
N. directa var. subtilis	-	-	-	20	-	-
N. peregrina	-	-	-	20	-	20

Table 36. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Nitzschia cylindrus	-	20	-	-	-	40
N. gelida	-	-	20			
N. grunowii	17,424	660	360	340	440	600
Pseudonitzschia delicatissima	-	-	40	-	-	-
Chlorophyta	5,808	100	80	280	360	260
Carteria vectensis	1,452	40	20	40	80	-
Chlamydomonas sp.	2,904	-	20	-	80	20
C. ballenyana	-	-	-	80	120	60
C. pulsatilla	1,452	60	40	140	80	180
Closterium sp.	-	-	-	20	-	-
Chrysophyta	10,164	440	300	380	180	140
Dinobryon balticum	7,986	360	280	300	140	-
D. cylindricum	726	60	-	40	-	-
Salpingoeca natans	1,452	20	20	40	40	120
Unidentified	-	-	-	-	-	20
Euglenophyta	-	20	20	60	40	60
Euglena sp.	-	-	-	20	20	-
E. acus	-	-	-	-	-	20
E. proxima	-	-	20	-	-	20
E. schmitzii	-	20	-	40	20	20

Table 36. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Pyrrophyta	5,808	200	220	260	260	200
Goniaulax sp.	-	-	-	20	-	-
G. cyst	-	-	-	20	20	-
G. scrippsae	726	-	60	-	-	-
Gymnodinium sp.	4,356	140	140	140	140	80
G. lohmanni	726	40	-	20	20	-
Gyrodinium spirale	-	-	-	20	40	80
Oxytoxum sp.	-	20	-	-	-	-
Prorocentrum sp.	-	-	-	-	40	-
Protoperidinium diabolum	-	-	20	40	-	40

Table 37. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 28, August 16, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	18,180	22,180	13,100	15,200	21,720	28,980
Bacillariophyta	17,760	21,800	12,900	14,920	21,140	28,480
Centrales	15,320	19,220	10,420	13,320	18,600	24,540
Chaetoceros affinis	220	300	40	180	60	220
C. decipiens	220	120	140	80	420	160
C. furcellatus	14,540	18,280	10,020	12,900	17,620	23,760
C. septentrionalis	20	140	40	40	100	200
C. wighami	180	160	-	-	-	-
Thalassiosira sp.	-	-	-	40	-	20
T. decipiens	140	220	180	80	400	180
Pennales	2,440	2,580	2,480	1,600	2,540	3,940
Achnanthes taeniata	20	40	-	-	40	-
Amphora inelegans	-	-	-	-	-	80
A. laevis var. laevissima	-	-	-	-	-	40
A. terroris	-	-	-	20	20	20
Cocconeis sp.	-	-	20	-	20	-
C. californica	20	-	-	-	20	-
C. scutellum	60	-	-	-	-	-
C. scutellum var. parva	20	20	60	40	-	-
Diploneis didyma	20	-	-	-	-	-
Fragilaria sp.	20	20	20	20	80	20
F. bicapitata	-	-	-	20	-	40
F. pinnata	80	80	60	40	200	320

Table 37. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Gomphonema sp.	-	-	-	-	20	-
Grammatophora angulosa	-	-	-	-	-	20
G. arctica	-	-	-	20	-	-
Licmophora sp.	20	-	-	40	-	-
Navicula sp.	-	-	-	-	-	20
N. crassirostris	-	-	-	-	20	-
N. directa	80	-	-	-	-	-
N. directa var. subtilis	20	20	-	-	80	20
N. peregrina	-	-	-	-	60	-
N. recurvata	-	-	40	-	-	20
N. rhynchocephala	-	-	-	-	20	-
N. transitans	-	-	-	-	20	20
Nitzschia sp.	-	-	-	-	-	20
N. acicularis	-	20	-	-	-	-
N. cylindrus	80	20	80	60	80	100
N. grunowii	1,960	2,360	2,200	1,340	1,780	3,200
N. linearis	20	-	-	-	60	-
N. seriata	-	-	-	-	20	-
Pinnularia quadratarea	20	-	-	20	-	-
Pseudonitzschia delicatissima	-	-	-	20	-	-
Chlorophyta	100	80	60	200	340	240
Chlamydomonas sp.	40	-	40	80	60	20
C. ballenyana	-	60	-	120	160	140
C. pulsatilla	60	20	20	-	120	80

Table 37. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Chrysophyta	20	80	20	-	80	40
Dinobryon balticum	20	20	-	-	-	20
Salpingoeca natans	-	60	20	-	40	20
Unidentified	-	-	-	-	40	-
Euglenophyta	80	-	-	-	-	-
Euglena sp.	40	-	-	-	-	-
E. schmitzii	40	-	-	-	-	-
Pyrrophyta	220	220	120	80	160	220
Goniaulax scrippsae	-	-	-	-	20	20
Gymnodinium sp.	120	120	60	60	40	160
G. lohmanni	40	-	-	-	-	-
Gyrodinium spirale	40	60	-	20	40	20
Prorocentrum sp.	-	-	20	-	40	-
Protoperidinium diabolum	20	40	40	-	20	20

Table 38. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 29, July 31, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	5,680	10,480	7,200	8,200
Bacillariophyta	4,920	4,780	6,540	5,540
Centrales	920	3,020	1,100	3,700
Biddulphia sp.	-	-	-	20
Chaetoceros affinis	-	160	-	60
C. borealis	-	-	40	40
C. decipiens	-	160	60	80
C. furcellatus	160	400	220	540
C. holsaticus	-	20	-	-
C. lauderi	40	-	-	-
C. septentrionalis	120	220	320	500
Coscinodiscus sp.	20	40	-	-
Cyclotella striata	20	-	40	-
Melosira arctica	-	-	20	-
Thalassiosira sp.	-	20	60	40
T. decipiens	540	1,760	320	2,380
T. nordenskioeldii	20	240	20	40
Pennales	4,000	1,760	5,440	1,840
Achnanthes polaris	-	-	20	-
A. taeniata	60	-	100	40
Amphora inelegans var. *polita*	440	80	-	-
A. terroris	60	-	440	-
Cocconeis decipiens	-	20	-	-

Table 38. (Cont'd.)

Seawater depth (m)	0	5	10	20
C. pseudomarginata	20	-	-	-
C. scutellum	160	120	320	20
C. scutellum var. parva	-	-	40	20
C. scutellum var. stauroneiformis	-	20	-	-
C. thumensis	-	-	100	-
Cylindrotheca closterium	40	-	80	-
Cymbella affinis	140	20	160	40
Diploneis bomboides	-	20	-	-
D. litoralis	120	40	20	-
Eunotia lunaris	20	-	20	-
Fragilaria sp.	100	60	-	-
F. bicapitata	20	40	80	80
F. capucina	-	-	60	60
F. construens	-	-	160	-
F. pinnata	460	160	600	140
F. striatula	80	40	-	-
Gomphonema augur	20	-	-	40
G. exiguum var. pachyclada	-	20	80	
G. gracile	20	20	-	-
Grammatophora arctica	-	20	20	-
Licmophora sp.	40	80	-	-
L. dalmatica	-	-	40	-
Navicula ammophila	-	40	20	-
N. amphibola	120	-	40	-

Table 38. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. cancellata	380	-	500	60
N. cryptocephala	-	-	20	20
N. debilissima	60	-	140	40
N. directa	-	20	80	20
N. directa var. subtilis	40	20	260	-
N. granii	-	-	40	20
N. grevillei	180	40	120	-
N. lineola	20	-	40	20
N. peregrina	40	80	80	180
N. transitans	60	-	20	-
N. transitans var. derasa	-	100	360	120
N. trigonocephala var. depressa	20	-	-	60
N. valida	80	-	140	-
Nedium affinis	-	-	120	-
Nitzschia acicularis	-	20	40	60
N. angularis var. kariana	60	-	60	-
N. cylindrus	60	200	-	680
N. frustulum var. perpusilla	-	80	-	-
N. grunowii	180	220	120	80
N. linearis	40	60	120	-
N. lineata	-	-	260	-
N. seriata	220	60	-	-
Pinnularia sp.	500	-	-	-
P. quadratarea	120	-	380	40
P. quadratarea var. bicontracta	-	-	40	-

Table 38. (Cont'd.)

Seawater depth (m)	0	5	10	20
P. quadratarea var. *capitata*	-	20	-	-
Pleurosigma elongatum	-	-	20	-
P. marinum	20	40	-	-
Rhabdonema arcuatum	-	-	20	-
Tabellaria fenestrata	-	-	40	-
T. flocculosa	-	-	20	-
Chlorophyta	620	3,720	240	1,460
Chlamydomonas sp.	20	60	-	20
C. ballenyana	80	-	100	80
C. cyst	300	2,660	100	1,000
C. tetraolaris	100	620	40	320
Dunaliella parva	100	380	-	40
Staurastrum megacanthum	20	-	-	-
Chrysophyta	100	1,200	240	600
Dinobryon balticum	-	700	20	20
Phaeocystis pouchetii	-	40	120	340
Synura uvella	60	80	100	160
Unidentified	40	380	-	80
Euglenophyta	20	240	-	20
Euglena proxima	-	40	-	-
E. schmitzii	20	160	-	20
E. viridis	-	40	-	-

Table 38. (Cont'd.)

Seawater depth (m)	0	5	10	20
Pyrrophyta	20	540	180	580
Glenodinium sp.	20	40	40	20
Goniaulax catenata	-	80	-	40
G. monilata	-	-	20	-
Gymnodinium lohmanni	-	-	40	-
Gyrodinium spirale	-	160	-	80
Oxytoxum sp.	-	40	-	140
Prorocentrum sp.	-	40	-	20
P. micans	-	120	-	20
P. rampii	-	-	60	240
Protoperidinium diabolum	-	60	20	20

Table 39. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 29, August 17, 1976.

Seawater depth (m)	0	5	10	20	30
Total phytoplankton (cells/litre)	17,100	14,220	14,940	9,240	9,100
Bacillariophyta	16,860	13,760	14,720	8,980	8,740
Centrales	15,740	13,120	13,900	8,040	7,420
Chaetoceros affinis	680	540	520	520	200
C. decipiens	1,260	640	1,420	520	260
C. furcellatus	13,080	11,240	11,200	6,500	6,740
C. septentrionalis	120	140	260	160	80
C. wighami	320	240	260	200	40
Cyclotella striata	-	20	-	-	-
Thalassiosira sp.	-	20	-	40	-
T. decipiens	280	280	240	100	100
Pennales	1,120	640	820	940	1,320
Achnanthes taeniata	-	-	-	20	-
Amphora inelegans	-	40	-	40	-
Cocconeis californica	20	-	20	-	-
C. scutellum	40	-	-	-	20
C. scutellum var. *parva*	40	-	-	-	-
C. thumensis	40	-	-	20	20
Diploneis litoralis	-	-	-	-	20
Fragilaria sp.	20	-	20	-	20
F. bicapitata	-	-	-	20	-
F. pinnata	20	60	60	40	80
Gomphonema sp.	-	-	20	20	-

Table 39. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
Grammatophora angulosa	-	20	-	-	-
G. arctica	20	-	-	-	-
Licmophora sp.	60	-	-	-	-
Navicula sp.	20	-	60	-	-
N. crassirostris	20	-	-	-	-
N. directa	-	-	-	-	60
N. directa var. *subtilis*	-	-	20	20	20
N. grevillei	40	20	-	-	-
N. peregrina	-	-	-	-	20
N. rhynchocephala	-	-	-	-	20
N. transitans var. *derasa*	-	20	-	-	-
Nitzschia sp.	-	20	-	-	-
N. cylindrus	-	-	-	100	20
N. gelida	-	20	-	-	-
N. grunowii	740	420	580	640	1,020
Plagiogramma staurophorum	-	20	-	-	-
Pleurosigma longum	20	-	-	-	-
Rhabdonema arcuatum	20	-	-	-	-
Synedra sp.	-	-	40	-	-
Tabellaria flocculosa	-	-	-	20	-
Chlorophyta	140	120	120	160	220
Carteria vectensis	-	-	-	20	-
Chlamydomonas ballenyana	120	120	100	120	160

Table 39. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
C. pulsatilla	20	-	20	20	60
Chrysophyta	20	20	-	-	-
Unidentified	20	20	-	-	-
Euglenophyta	20	40	40	-	-
Euglena proxima	-	20	20	-	-
E. schmitzii	20	20	20	-	-
Pyrrophyta	60	280	60	100	140
Goniaulax sp.	-	-	-	-	20
G. cyst	-	-	-	-	20
G. scrippsae	20	-	-	-	-
Gymnodinium sp.	20	80	-	20	20
G. lohmanni	-	-	-	-	20
Gyrodinium spirale	20	140	60	40	40
Prorocentrum sp.	-	40	-	20	-
P. rampii	-	20	-	-	-
Protoperidinium diabolum	-	-	-	20	20

Table 40. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 29, August 25, 1976.

Seawater depth (m)	0	5	10	20	30
Total phytoplankton (cells/litre)	16,700	9,400	8,840	7,940	8,100
Bacillariophyta	16,240	9,160	8,580	7,660	7,780
Centrales	13,300	7,340	7,220	5,960	6,000
Chaetoceros affinis	160	-	-	-	40
C. decipiens	620	80	260	100	200
C. furcellatus	12,240	7,060	6,620	5,640	5,560
C. septentrionalis	-	40	40	-	60
C. wighami	-	-	180	-	-
Thalassiosira sp.	60	40	40	60	-
T. decipiens	220	120	80	160	140
Pennales	2,940	1,820	1,360	1,700	1,780
Achnanthes taeniata	80	20	-	-	60
Amphora sp.	-	-	-	-	20
A. angusta var. ventricosa	40	-	-	-	-
A. ineleqans	-	20	-	-	-
A. terroris	-	-	-	-	40
Cocconeis californica	-	-	-	-	20
C. scutellum	-	40	20	20	20
C. scutellum var. parva	-	-	-	20	-
C. thumensis	20	-	-	-	-
Cylindrotheca closterium	40	-	-	-	-
Diploneis bombus	-	20	-	-	-
D. smithii	20	20	20	-	-

Table 40. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
Fragilaria sp.	40	60	-	-	-
F. bicapitata	-	20	-	20	-
F. pinnata	20	40	80	100	60
Gomphonema sp.	40	60	-	20	40
G. exiguum var. pachycladum	-	-	-	20	-
Grammatophora arctica	-	-	20	-	-
G. hamulifera	-	-	-	-	20
Licmophora sp.	-	20	40	-	20
Navicula sp.	20	20	40	280	40
N. cancellata	-	20	-	-	-
N. debilissima	60	-	20	-	-
N. directa	-	-	-	20	-
N. directa var. subtilis	20	-	20	20	-
N. forcipata	20	-	-	-	20
N. glacialis	-	20	-	20	-
N. grevillei	20	-	-	-	-
N. peregrina	-	20	20	-	-
N. transitans var. derasa	100	20	60	-	20
Nedium affinis	-	-	-	20	-
Nitzschia sp.	40	-	-	20	-
N. cylindrus	100	-	20	20	-
N. grunowii	2,240	1,360	980	1,080	1,380
Pinnularia sp.	-	40	-	-	-
Pleurosigma sp.	20	-	-	-	-

Table 40. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
P. longum	-	-	-	-	20
Synedra sp.	-	-	20	20	-
Chlorophyta	360	160	140	140	160
Carteria vectensis	-	20	-	-	-
Chlamydomonas sp.	-	20	-	-	-
C. ballenyana	200	100	20	80	80
C. pulsatilla	160	20	120	60	80
Chrysophyta	20	-	40	40	60
Salpingoeca natans	20	-	40	20	40
Unidentified	-	-	-	20	20
Pyrrophyta	80	80	80	100	100
Goniaulax cyst	-	20	-	-	20
Gymnodinium lohmanni	-	-	40	60	40
Gyrodinium spirale	40	20	-	40	-
Prorocentrum rampii	20	20	40	-	-
Protoperidinium diabolum	20	20	-	-	40

Table 41. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 29, September 1, 1976.

Seawater depth (m)	0	1	5	10	20
Total phytoplankton (cells/litre)	5,143,280	3,682,998	2,465,385	2,548,775	3,597,875
Bacillariophyta	5,094,860	3,670,656	2,442,520	2,535,325	3,579,045
Centrales	5,081,410	3,668,478	2,441,175	2,497,665	3,564,250
Chaetoceros affinis	78,010	45,738	30,935	43,040	28,245
C. atlanticus	-	2,904	1,345	5,380	1,345
C. decipiens	59,180	41,382	51,110	56,490	33,625
C. furcellatus	4,731,710	3,476,814	2,279,775	2,224,630	3,451,270
C. lauderi	-	3,630	-	-	-
C. septentrionalis	5,380	5,082	6,725	8,070	1,345
C. wighami	72,630	32,670	10,760	84,735	-
Cyclotella sp.	-	-	-	1,345	-
Thalassiosira sp.	13,450	21,780	16,140	-	1,345
T. decipiens	121,050	38,478	44,385	73,975	47,075
Pennales	13,450	2,178	1,345	37,660	14,795
Achnanthes taeniata	-	-	-	-	1,345
Cocconeis scutellum var. *parva*	-	726	-	1,345	-
Cylindrotheca closterium	-	-	1,345	1,345	-
Eunotia sp.	-	726	-	-	-
Fragilaria sp.	5,380	-	-	1,345	-
Navicula sp.	-	726	-	-	4,035
Nitzschia acicularis	2,690	-	-	-	1,345
N. cylindrus	5,380	-	-	-	8,070
N. grunowii	-	-	-	32,280	-
Synedra sp.	-	-	-	1,345	-

Table 41. (Cont'd.)

Seawater depth (m)	0	1	5	10	20
Chlorophyta	37,660	5,808	14,795	9,415	16,140
Ankistrodesmus sp.	2,690	726	1,345	2,690	5,380
Chlamydomonas ballenyana	34,970	4,356	9,415	4,035	1,345
C. pulsatilla	-	726	4,035	2,690	9,415
Euglenophyta	5,380	2,904	-	-	-
Euglena proxima	-	726	-	-	-
E. schmitzii	5,380	2,178	-	-	-
Pyrrophyta	5,380	3,630	8,070	4,035	2,690
Goniaulax sp.	-	726	1,345	-	-
G. scrippsae	-	726	1,345	1,345	-
Gymnodinium sp.	-	-	-	-	1,345
G. lohmanni	-	726	-	1,345	-
Gyrodinium spirale	-	-	1,453	-	-
Peridinium sp.	-	1,452	-	-	-
Prorocentrum rampii	5,380	-	4,035	1,345	-
Protoperidinium diabolum	-	-	-	-	1,345

Table 42. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 30, July 31, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	10,140	8,060	7,780	11,240	11,480	15,460
Bacillariophyta	6,400	6,120	3,820	5,520	6,540	12,500
Centrales	1,820	4,360	2,560	3,800	5,300	11,140
Chaetoceros affinis	80	280	140	260	420	820
C. borealis	40	-	-	40	100	-
C. decipiens	40	460	160	140	900	740
C. furcellatus	140	1,180	360	820	1,160	7,720
C. septentrionalis	240	280	160	320	1,080	660
C. wighami	-	120	-	40	-	-
Coscinodiscus sp.	-	20	20	-	-	60
Cyclotella striata	40	-	-	40	20	-
Thalassiosira sp.	20	-	-	-	-	-
T. decipiens	1,120	1,820	1,620	2,140	1,440	1,000
T. nordenskioeldii	100	200	100	-	180	140
Pennales	4,580	1,760	1,260	1,720	1,240	1,360
Achnanthes taeniata	60	-	40	20	-	-
Amphiprora concilians	-	-	20	60	-	-
Amphora inelegans	-	-	40	-	-	-
A. inelegans var. *polita*	40	-	-	-	-	-
A. terroris	180	60	-	60	-	40
Cocconeis californica	-	-	20	-	-	-
C. scutellum	140	40	60	140	40	60
C. scutellum var. *parva*	20	20	-	-	-	-

Table 42. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. thumensis	60	40	-	-	-	-
Cylindrotheca closterium	100	100	20	40	-	-
Cymbella affinis	200	-	-	-	20	20
Diploneis bomboides	20	-	-	-	-	-
D. litoralis	60	-	-	60	-	140
D. smithii	20	-	-	-	-	-
Eunotia arcus	20	-	-	-	-	-
E. lunaris	-	20	-	-	-	-
Fragilaria sp.	-	-	-	80	-	60
F. bicapitata	180	60	20	40	40	-
F. pinnata	460	100	-	60	100	100
F. striatula	60	-	80	-	-	40
Gomphonema sp.	-	-	20	60	-	-
G. gracile	-	-	-	20	20	60
Grammatophora arctica	40	-	-	-	-	-
Licmophora sp.	20	-	-	-	-	-
L. dalmatica	60	-	40	-	-	-
Navicula amphibola	40	-	20	-	-	-
N. cancellata	420	120	20	60	40	60
N. debilissima	180	-	-	-	-	-
N. directa	80	-	-	-	-	-
N. directa var. subtilis	60	-	-	40	-	-
N. granii	80	320	80	-	40	40
N. lineola	-	-	-	-	-	20

Table 42. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. peregrina	140	80	220	100	160	80
N. pygmaea	40	-	-	-	-	-
N. transitans	-	-	-	20	-	-
N. transitans var. *derasa*	540	20	40	40	-	20
N. valida	-	40	-	-	-	20
Nedium affinis	40	-	-	-	-	-
Nitzschia acicularis	80	20	-	20	20	60
N. angularis var. *kariana*	40	-	-	-	-	-
N. cylindrus	200	500	380	500	140	100
N. frustulum	40	40	20	-	-	-
N. frustulum var. *perpusilla*	-	-	20	-	-	-
N. grunowii	-	-	-	160	260	360
N. linearis	20	40	20	20	40	40
N. lineata	-	-	-	60	120	-
N. seriata	220	60	40	60	20	-
Pinnularia sp.	300	60	-	-	40	-
P. quadratarea	60	20	20	-	-	40
Pleurosigma elongatum	-	-	20	-	20	-
Rhabdonema arcuatum	-	-	-	-	120	-
Tabellaria sp.	20	-	-	-	-	-
T. flocculosa	240	-	-	-	-	-
Chlorophyta	3,160	1,220	3,060	4,960	4,040	2,680
Chlamydomonas ballenyana	20	-	-	60	-	-
C. cyst	2,920	300	2,060	4,160	3,020	860

Table 42. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. tetraolaris	100	520	460	560	780	1,320
Dunaliella parva	120	400	500	180	240	480
Tetraselnis levis	-	-	40	-	-	-
Trochiscia multispinosa	-	-	-	-	-	20
Chrysophyta	400	220	440	340	460	180
Dinobryon balticum	20	-	80	40	120	40
D. cylindricum	80	-	-	-	-	-
Phaeocystis pouchetii	80	80	40	60	60	-
Synura uvella	100	60	180	100	120	80
Unidentified	120	80	140	140	160	60
Euglenophyta	-	20	-	140	400	60
Euglena schmitzii	-	20	-	140	400	60
Pyrrophyta	180	480	460	420	40	40
Glenodinium sp.	-	40	-	20	-	-
Goniaulax monilata	20	-	-	-	-	-
G. catenata	-	-	20	20	-	-
Gyrodinium spirale	-	40	20	20	-	-
Oxytoxum sp.	-	100	20	-	-	20
Peridinium sp.	-	-	-	20	-	-
P. minusculum	-	20	60	-	-	-
Prorocentrum sp.	20	20	20	60	20	-

Table 42. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
P. micans	-	60	20	100	20	20
P. rampii	120	180	280	160	-	-
Protoperidinium diabolum	20	20	20	20	-	-

Table 43. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 30, August 2, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	5,560	16,080	6,900	15,040	15,280	10,260
Bacillariophyta	4,400	4,840	3,440	13,880	13,220	6,000
Centrales	2,920	2,780	2,560	13,400	12,240	5,760
Biddulphia aurita	-	20	-	-	-	-
Chaetoceros affinis	540	60	200	2,160	640	360
C. borealis	-	-	-	-	80	-
C. decipiens	320	460	300	1,340	1,740	240
C. furcellatus	1,520	900	1,240	8,760	8,480	4,720
C. lauderi	-	-	-	-	20	-
C. septentrionalis	20	160	80	560	700	140
Coscinodiscus sp.	-	-	-	20	-	-
Cyclotella striata	20	-	-	-	-	-
Thalassiosira sp.	20	200	480	340	240	20
T. decipiens	480	900	260	220	320	260
T. nordenskioeldii	-	80	-	-	20	-
T. oestrupii	-	-	-	-	-	20
Pennales	1,480	2,060	880	480	980	240
Achnanthes taeniata	60	80	20	40	200	-
Amphora inelegans var. polita	80	-	-	-	40	-
A. terroris	40	140	-	40	-	-
Cocconeis californica	-	20	-	-	-	-
C. placentula	-	-	-	-	-	20
C. pseudomarginata	-	40	-	-	-	-

Table 43. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
C. scutellum	60	160	20	60	40	20
C. thumensis	60	120	20	-	80	-
Cylindrotheca closterium	-	-	20	20	20	-
Cymbella affinis	100	20	-	-	-	-
Diploneis bomboides	60	-	-	-	-	-
D. didyma	-	20	-	-	-	-
D. litoralis	20	-	-	-	-	-
D. smithii	-	-	-	-	20	-
Fragilaria bicapitata	20	40	20	-	20	-
F. capucina	100	40	-	-	-	-
F. pinnata	20	80	40	20	20	-
Gomphonema sp.	40	40	-	-	-	-
G. augur	20	-	-	-	-	-
G. exiguum var. pachycladum	-	-	20	20	-	-
G. gracile	-	-	60	-	-	-
Grammatophora arctica	20	-	-	-	-	-
Licmophora sp.	-	20	-	-	-	-
L. dalmatica	20	-	20	-	-	-
Navicula cancellata	260	120	40	-	20	-
N. cryptocephala	-	-	40	-	-	-
N. directa	-	40	20	-	-	-
N. directa var. subtilis	-	20	-	-	20	-
N. forcipata	-	20	-	-	-	-
N. grevillei	20	60	40	-	20	-

Table 43. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
N. lineola	-	80	-	-	-	-
N. peregrina	40	100	40	-	20	40
N. transitans var. *derasa*	-	20	-	-	-	20
N. valida	-	-	40	-	-	-
Nitzschia acicularis	20	20	20	-	20	-
N. cylindrus	140	220	40	100	120	80
N. distans	-	-	20	-	-	-
N. frustulum	-	20	20	20	-	-
N. grunowii	140	200	80	100	220	60
N. linearis	-	40	20	20	80	-
N. lineata	60	100	200	-	-	-
N. seriata	40	-	-	-	-	-
Pinnularia sp.	40	-	20	40	-	-
P. interrupta	-	20	-	-	-	-
P. quadratarea	-	20	-	-	20	-
P. quadratarea var. *capitata*	-	40	-	-	-	-
Pleurosigma elongatum	-	-	20	-	-	-
Synedra nana	-	40	-	-	-	-
Tabellaria fenestrata	-	60	-	-	-	-
T. flocculosa	-	-	20	-	-	-
Chlorophyta	1,080	10,140	2,640	920	1,840	4,120
Chlamydomonas ballenyana	20	-	180	-	60	-
C. cyst	360	9,300	1,600	740	1,660	3,480
C. tetraolaris	200	540	800	180	100	560

Table 43. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Dunaliella parva	420	240	40	-	-	80
Unidentified	80	60	20	-	20	-
Chrysophyta	80	640	360	120	40	-
Dinobryon balticum	-	-	120	-	-	-
D. cylindricum	20	-	-	-	-	-
Phaeocystis pouchetii	60	440	80	60	-	-
Synura uvella	-	100	40	-	-	-
Unidentified	-	100	120	60	40	-
Euglenophyta	-	-	80	60	40	-
Euglena proxima	-	-	20	-	-	-
E. schmitzii	-	-	60	60	40	-
Pyrrophyta	60	460	380	60	140	140
Glenodinium sp.	-	140	80	20	40	20
Goniaulax sp.	-	-	-	-	20	-
G. catenata	-	-	20	-	-	-
G. scrippsae	-	20	-	-	-	-
Gyrodinium spirale	20	60	80	-	40	20
Prorocentrum sp.	-	40	80	20	-	20
P. micans	20	20	20	-	-	20
P. rampii	-	140	100	20	40	60
Protoperidinium diabolum	20	40	-	-	-	-

Table 44. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 30, August 17, 1976.

Seawater depth (m)	0	5	10	20	30
Total phytoplankton (cells/litre)	13,860	13,800	8,020	9,440	10,620
Bacillariophyta	13,640	13,320	7,800	9,120	10,340
Centrales	11,580	12,640	6,480	8,280	8,780
Chaetoceros affinis	80	100	20	-	60
C. decipiens	220	160	80	240	440
C. furcellatus	10,740	12,020	6,080	7,860	8,040
C. septentrionalis	380	160	200	40	20
C. wighami	-	-	-	-	120
Thalassiosira sp.	-	20	-	20	20
T. decipiens	160	180	100	120	80
Pennales	2,060	680	1,320	840	1,560
Achnanthes brevipes	20	-	-	-	-
A. taeniata	-	40	-	20	-
Amphora inelegans	40	-	-	-	-
A. laevis var. *laevissima*	-	40	-	-	-
A. terroris	40	-	-	-	-
Cocconeis scutellum	-	-	40	-	40
A. thumensis	-	-	-	-	20
Cylindrotheca closterium	-	-	20	-	-
Cymbella affinis	-	-	-	-	40
Diploneis sp.	-	-	-	-	20
D. smithii	-	-	20	-	-
Eunotia sp.	-	-	20	-	-

Table 44. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
Fragilaria sp.	80	40	-	-	-
F. bicapitata	-	20	20	-	-
F. pinnata	180	140	40	20	80
Gomphonema sp.	80	40	-	20	20
Grammatophora arctica	-	-	-	20	-
Licmophora sp.	40	-	-	20	-
Navicula sp.	20	20	-	-	20
N. cancellata	20	-	-	-	-
N. crassirostris	-	-	20	-	-
N. debilissima	20	40	40	-	-
N. directa	-	20	-	-	-
N. directa var. subtilis	-	40	-	-	-
N. grevillei	40	20	-	-	20
N. novadecipiens	20	-	-	-	-
N. peregrina	20	-	20	-	-
N. rhynchocephala	40	-	-	-	-
N. transitans	40	-	20	-	-
N. transitans var. derasa	20	-	-	-	-
Nitzschia sp.	40	-	-	-	-
N. acicularis	-	-	-	20	-
N. cylindrus	20	20	120	100	40
N. frigida	20	-	-	-	-
N. grunowii	1,060	100	920	620	1,220
N. linearis	40	20	-	-	-

Table 44. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
N. frustulum	20	-	-	-	-
N. sigma	-	-	-	-	20
Pinnularia sp.	20	40	-	-	-
P. quadratarea	60	-	-	-	-
Pseudonitzschia delicatissima	-	-	20	-	-
Tabellaria fenestrata	40	-	-	-	-
T. flocculosa	-	40			
Trachyneis aspera	20	-	-	-	20
Chlorophyta	140	160	80	140	160
Chlamydomonas sp.	-	-	40	40	20
C. ballenyana	100	100	-	100	120
C. pulsatilla	40	60	40	-	20
Chrysophyta	20	-	40	-	-
Dinobryon sp.	-	-	40	-	-
Salpingoeca natans	20	-	-	-	-
Euglenophyta	20	40	-	20	-
Euglena sp.	-	20	-	-	-
E. proxima	-	-	-	20	-
E. schmitzii	20	20	-	-	-

Table 44. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
Pyrrophyta	40	280	100	160	120
Glenodinium sp.	20	100	-	60	-
Gymndinium sp.	-	-	60	-	20
G. lohmanni	-	-	-	-	20
Gyrodinium spirale	-	180	40	80	80
Protoperidinium diabolum	20	-	-	20	-

Table 45. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 30, August 25, 1976.

Seawater depth (m)	0	5	10	20	30	50
Total phytoplankton (cells/litre)	7,940	9,020	8,240	14,060	12,680	19,160
Bacillariophyta	7,780	8,720	7,980	13,440	12,220	18,740
Centrales	5,440	7,340	6,440	11,220	9,360	15,040
Chaetoceros affinis	-	20	100	40	200	-
C. decipiens	120	360	140	420	-	160
C. furcellatus	4,960	6,720	6,000	10,580	9,060	14,460
C. septentrionalis	140	40	40	120	-	180
Thalassiosira sp.	20	-	-	40	40	100
T. decipiens	200	200	160	20	60	140
Pennales	2,340	1,380	1,540	2,220	2,860	3,700
Achnanthes sp.	-	-	20	-	-	-
A. taeniata	140	-	540	20	20	-
Amphora inelegans	-	-	40	-	-	80
A. laevis var. laevissima	-	-	-	-	-	40
A. terroris	40	-	-	40	-	-
Cocconeis californica	20	-	-	-	-	-
C. scutellum	-	20	-	-	-	20
C. scutellum var. parva	-	-	-	20	-	-
Diploneis sp.	-	-	-	-	-	20
Fragilaria sp.	120	60	-	-	20	-
F. bicapitata	-	-	-	20	20	-
F. pinnata	80	100	80	100	140	140
Gomphonema sp.	20	-	20	20	20	80

Table 45. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Grammatophora sp.	-	20	-	20	-	20
G. hyalina	20	-	-	-	-	-
Navicula sp.	80	20	60	40	60	40
N. cancellata	40	-	-	-	-	-
N. debilissima	20	-	-	20	-	-
N. directa	40	-	20	-	-	-
N. gelida	-	20	-	20	-	-
N. grevillei	20	-	-	-	-	-
N. peregrina	-	-	-	20	-	-
N. transitans var. derasa	60	-	-	20	-	40
Nitzschia sp.	20	-	-	-	-	40
N. acicularis	20	-	-	-	-	20
N. cylindrus	160	40	20	20	40	20
N. grunowii	1,020	1,100	720	1,780	2,500	3,080
N. linearis	-	-	-	-	20	-
Pinnularia sp.	60	-	-	-	-	-
P. interrupta f. biceps	20	-	-	-	-	-
Pleurosigma longum	-	-	-	-	20	-
Synedra sp.	20	-	20	40	-	60
S. tabulata	20	-	-	20	-	-
Tabellaraia flocculosa	300	-	-	-	-	-
Chlorophyta	100	220	220	400	340	300
Chlamydomonas ballenyana	20	160	80	240	220	140
C. pulsatilla	60	60	140	160	120	140

Table 45. (Cont'd.)

Seawater depth (m)	0	5	10	20	30	50
Cosmarium sp.	20	-	-	-	-	-
Staurastrum sp.	-	-	-	-	-	20
Chrysophyta	20		20	20	40	20
Dinobryon cylindricum	20	-	-	-	-	-
Phaeocystis pouchetii	-	-	20	-	20	-
Salpingoeca natans	-	-	-	20	20	20
Unidentified	-	20	-	-	-	-
Euglenophyta	-	20	-	-		
Euglena proxima	-	20	-	-	-	-
Pyrrophyta	40	40	20	200	80	100
Goniaulax cyst	-	-	-	20	-	20
Gymnodinium sp.	-	-	-	-	-	20
G. lohmanni	20	-	-	-	-	-
Gyrodinium spirale	20	20	-	160	20	20
Prorocentrum rampii	-	-	-	-	20	20
Protoperidinium diabolum	-	20	20	20	40	20

Table 46. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 30, August 28, 1976.

Seawater depth (m)	0	1	5	10	20	30	46
Total phytoplankton (cells/litre)	9,840	8,040	8,660	9,060	6,460	4,380	6,920
Bacillariophyta	9,000	7,180	8,020	7,720	5,740	3,780	5,960
Centrales	8,240	6,860	7,000	7,260	5,620	3,740	5,760
Chaetoceros affinis	300	380	100	180	180	100	260
C. borealis	20	-	-	-	-	-	-
C. decipiens	640	400	480	780	400	240	460
C. furcellatus	6,700	5,300	5,900	5,820	4,640	3,200	4,580
C. septentrionalis	40	40	80	40	40	60	-
C. wighami	380	560	240	260	180	-	280
Coscinodiscus angustelineatus	-	-	20	-	-	-	-
Thalassiosira sp.	40	-	60	100	100	60	80
T. decipiens	120	180	120	80	80	80	100
Pennales	760	320	1,020	460	120	40	200
Achnanthes sp.	-	-	20	-	-	-	-
A. taeniata	20	-	-	-	-	-	-
A. laevis var. *laevissima*	-	-	40	-	-	-	-
Amphora terroris	20	-	-	-	-	-	-
Cocconeis scutellum	-	-	20	-	-	-	-
C. thumensis	-	-	20	-	-	-	20
Cylindrotheca closterium	-	-	-	20	20	-	20
Cymbella affinis	-	-	40	-	-	-	-
Fragilaria sp.	60	20	20	-	-	-	20
F. pinnata	20	20	140	-	20	-	20

Table 46. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
Gomphonema sp.	-	-	40	-	-	-	-
Grammatophora arctica	-	-	-	-	-	20	-
Gyrosigma fasciola	-	-	-	20	-	-	-
Licmophora sp.	-	-	-	20	-	-	-
Navicula sp.	-	20	80	-	20	-	20
N. cancellata	-	-	20	-	-	-	20
N. debilissima	20	20	20	-	-	-	-
N. directa var. subtilis	-	-	20	20	-	-	-
N. grevillei	-	20	40	-	-	-	-
N. lineola	-	-	20	-	-	-	-
N. peregrina	20	-	-	-	20	-	-
N. transitans var. derasa	40	-	-	-	-	-	-
Nitzschia sp.	-	-	20	-	-	-	-
N. cylindrus	-	-	-	20	20	-	-
N. frustulum	-	-	-	20	-	-	-
N. grunowii	460	120	440	300	20	20	80
N. linearis	-	-	-	20	-	-	-
N. sigma	-	-	20	-	-	-	-
Pinnularia sp.	60	40	-	-	-	-	-
Rhabdonema minutum	-	-	-	20	-	-	-
Synedra acus	-	60	-	-	-	-	-
S. tabulata	20	-	-	-	-	-	-
Tabellaraia flocculosa	20	-	-	-	-	-	-

Table 46. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
Chlorophyta	300	280	220	300	420	240	460
Ankistrodesmus sp.	-	-	-	-	-	20	-
Chlamydomonas sp.	-	-	-	20	20	-	-
C. ballenyana	240	180	200	260	360	220	420
C. pulsatilla	60	100	-	20	40	-	40
Cosmarium sp.	-	-	20				
Chrysophyta	120	40	-	80	80	20	60
Dinobryon sp.	-	-	-	20	-	-	-
D. balticum	-	-	-	-	20	-	-
D. cylindricum	20	-	-	-	20	-	40
Phaeocystis pouchetii	-	-	-	20	-	20	-
Salpingoeca natans	40	20	-	40	40	-	20
Unidentified	60	20	-	-	-	-	-
Euglenophyta	-	-	20	-	-	20	20
Euglena proxima	-	-	-	-	-	20	-
E. schmitzii	-	-	20	-	-	-	20
Pyrrophyta	100	100	60	260	100	60	160
Goniaulax sp.	-	20	-	-	-	-	20
G. cyst	-	-	-	-	-	-	20
G. scrippsae	-	20	20	-	-	-	40
Gymnodinium lohmanni	40	20	20	160	-	20	-
Gyrodinium spirale	-	-	20	100	60	40	40

Table 46. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
Oxytoxum sp.	-	20	-	-	-	-	-
Peridinium sp.	-	-	-	-	-	-	20
Prorocentrum rampii	-	-	-	-	20	-	20
Protoperidinium diabolum	60	20	-	-	20	-	-
Unidentified algal cyst	320	440	340	700	120	260	260

Table 47. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 31, July 31, 1976.

Seawater depth (m)	0	5	8
Total phytoplankton (cells/litre)	21,020	8,220	7,520
Bacillariophyta	20,460	2,780	6,260
Centrales	18,200	1,420	2,540
Chaetoceros affinis	1,280	-	160
C. debilis	460	-	-
C. decipiens	4,520	20	300
C. fragilis	480	-	-
C. furcellatus	5,320	40	320
C. holsaticus	260	-	-
C. septentrionalis	4,140	20	140
C. wighami	1,320	-	-
Cyclotella striata	100	-	20
Thalassiosira decipiens	120	1,180	1,520
T. nordenskioeldii	200	160	80
Pennales	2,260	1,360	3,720
Achnanthes taeniata	20	20	80
Amphora inelegans	40	-	-
A. terroris	80	-	-
Cocconeis scutellum	-	80	80
C. thumensis	-	-	40
Cymbella affinis	80	80	-
Diploneis bomboides	-	20	-
D. litoralis	20	40	40

Table 47. (Cont'd.)

Seawater depth (m)	0	5	8
D. smithii	20	-	-
Eunotia lunaris	-	20	-
Fragilaria sp.	20	-	20
F. bicapitata	40	40	80
F. pinnata	140	80	100
F. striatula	140	-	60
Fragilariopsis nana	-	20	-
Gomphonema sp.	40	60	-
G. augur	20	20	-
Navicula amphibola	20	20	-
N. cancellata	280	-	100
N. debilissima	40	-	20
N. directa var. subtilis	-	-	80
N. grevillei	60	-	60
N. peregrina	20	-	-
N. pygmaea	20	20	-
N. transitans	-	20	60
N. transitans var. derasa	200	60	-
Nitzschia acicularis	20	40	-
N. cylindrus	60	240	160
N. frustulum	-	20	20
N. frustulum var. perpusilla	20	20	-
N. grunowii	40	180	80
N. seriata	40	-	-

Table 47. (Cont'd.)

Seawater depth (m)	0	5	8
N. sigma	-	-	20
Opephora martyi	80	-	-
Pinnularia sp.	100	100	20
Pleurosigma elongatum	20	40	-
P. marinum	-	-	20
Rhabdonema arcuatum	60	-	-
Synedra sp.	80	120	-
S. pulchella	-	-	40
Tabellaria sp.	160	-	-
T. fenestrata	300	-	-
Chlorophyta	500	4,960	840
Chlamydomonas sp.	-	40	120
C. ballenyana	-	180	60
C. cyst	400	4,240	-
C. tetraolaris	40	460	600
Dunaliella parva	20	40	40
Staurastrum megacanthum	20	-	-
Trochiscia multispinosa	20	-	20
Chrysophyta	60	300	200
Dinobryon balticum	-	20	-
D. cylindricum	20	-	-
Phaeocystis pouchetii	20	140	120

Table 47. (Cont'd.)

Seawater depth (m)	0	5	8
Synura uvella	-	100	40
Unidentified	20	40	40
Pyrrophyta	-	180	220
Glenodinium sp.	-	-	40
Goniaulax monilata	-	20	-
Gyrodinium spirale	-	-	40
Peridinium minusculum	-	40	-
Prorocentrum micans	-	40	80
P. rampii	-	60	60
Protoperidinium diabolum	-	20	-

Table 48. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 31, August 28, 1976.

Seawater depth (m)	0	1	5	10
Total phytoplankton (cells/litre)	6,940	17,460	15,600	16,760
Bacillariophyta	6,540	16,940	15,080	15,960
Centrales	6,320	16,840	15,000	15,920
Chaetoceros affinis	220	580	600	280
C. atlanticus	-	-	40	-
C. decipiens	60	860	1,100	980
C. furcellatus	5,380	15,080	12,500	11,960
C. septentrionalis	20	80	20	40
C. wighami	440	180	700	2,420
Leptocylindrus danicus	160	20	-	-
Thalassiosira sp.	40	20	20	240
T. decipiens	-	20	20	-
Pennales	220	100	80	40
Cylindrotheca closterium	20	-	-	20
Cymbella sp.	40	-	-	-
Diploneis smithii	20	-	-	-
Eunotia arcus	-	-	-	20
Gomphonema sp.	-	-	40	-
Licmophora sp.	20	-	-	-
Navicula sp.	20	40	20	-
Nitzschia cylindrus	-	60	-	-
N. grunowii	100	-	20	-

Table 48. (Cont'd.)

Seawater depth (m)	0	1	5	10
Chlorophyta	360	140	400	320
Carteria vectensis	-	-	20	-
Chlamydomonas sp.	-	-	20	-
C. ballenyana	240	40	240	200
C. pulsatilla	80	60	120	120
Cosmarium sp.	40	20	-	-
Staurastrum sp.	-	20	-	-
Chrysophyta	20	20	40	40
Phaeocystis pouchetii	-	-	40	20
Unidentified	20	20	-	20
Pyrrophyta	20	100	80	240
Goniaulax sp.	-	-	40	-
G. cyst	-	-	-	20
G. scrippsae	-	-	-	20
Gyrodinium spirale	-	-	20	140
Oxytoxum sp.	-	-	-	20
Prorocentrum rampii	-	40	-	-
Protoperidinium diabolum	20	60	20	40
Unidentified algal cyst	-	260	-	200

Table 49. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 32, July 30, 1976.

Seawater depth (m)	1	5	10	20	30
Total phytoplankton (cells/litre)	8,260	10,200	2,280	5,840	7,180
Bacillariophyta	6,160	3,260	1,920	3,760	3,980
Centrales	880	740	960	2,300	3,220
Chaetoceros affinis	-	-	-	-	40
C. decipiens	40	-	20	180	500
C. furcellatus	140	140	60	380	1,100
C. lauderi	-	-	-	-	20
C. septentrionalis	40	40	100	180	300
C. wighami	-	-	-	60	60
Coscinodiscus	-	-	20	40	20
Melosira islandica	20	-	-	-	-
Thalassiosira decipiens	560	500	700	1,260	1,060
T. nordenskioeldii	80	60	60	200	120
Pennales	5,280	2,520	960	1,460	760
Achnanthes taeniata	500	20	-	-	-
Amphiprora concilians	-	20	-	20	-
Amphora ineleqans	-	-	-	40	-
A. ineleqans var. polita	500	260	-	-	-
Cocconeis pseudomarginata	-	20	-	-	20
C. scutellum	400	120	60	120	20
C. scutellum var. parva	20	-	-	-	-
Cylindrotheca closterium	20	20	20	-	-
Cymbella affinis	100	20	-	-	-

Table 49. (Cont'd.)

Seawater depth (m)	0	5	10	20	30
Diploneis bomboides	20	40	-	-	-
D. didyma	20	20	-	-	-
D. smithii	60	40	-	-	-
Eunotia arcus	20	20	-	-	-
E. lunaris	-	20	20	-	-
Fragilaria sp.	100	40	-	-	-
F. bicapitata	80	-	80	20	20
F. intermedia	-	-	20	20	20
F. pinnata	220	280	60	100	40
F. striatula	80	-	-	-	-
Fragilariopsis nana	-	20	20	-	20
Gomphonema sp.	-	60	-	-	-
G. augur	40	20	-	-	-
G. gracile	20	-	-	-	20
Licmophora dalmatica	80	-	40	-	-
Navicula amphibola	20	-	20	20	-
N. annulata	-	-	-	-	20
N. cancellata	540	340	80	120	40
N. debilissima	100	100	-	20	40
N. directa	-	20	80	-	20
N. directa var. subtilis	100	20	40	20	-
N. granii	60	-	20	-	-
N. grevillei	140	120	20	20	-
N. kariana	20	-	-	-	-

Table 49. (Cont'd.)

Seawater depth (m)	1	5	10	20	30
N. lineola	20	140	-	-	-
N. peregrina	140	20	20	60	40
N. pygmaea	20	-	-	-	-
N. transitans	-	20	-	-	-
N. transitans var. derasa	220	200	20	40	60
Nedium affinis	40	-	-	-	-
Nitzschia acicularis	20	40	-	20	20
N. angularis var. kariana	40	20	-	-	-
N. cylindrus	80	-	60	80	60
N. frustulum	-	20	-	100	20
N. frustulum var. perpusilla	40	-	-	-	-
N. grunowii	-	160	60	540	20
N. linearis	20	-	-	-	-
N. lineata	160	-	60	-	240
N. seriata	-	20	-	20	-
Opephora martyi	20	40	-	-	-
Pinnularia sp.	260	120	60	-	-
P. quadratarea	80	40	-	-	-
Pleurosigma angulatum	20	-	-	-	-
P. elongatum	-	-	-	20	-
P. marinum	-	-	-	-	20
P. normanii	20	-	20	-	-
Rhabdonema arcuatum	20	-	-	-	-
Synedra pulchella	80	20	40	60	-

Table 49. (Cont'd.)

Seawater depth (m)	1	5	10	20	30
Tabellaria flocculosa	720	20	40	-	-
Chlorophyta	1,160	4,520	140	1,460	2,740
Chlamydomonas sp.	-	120	-	-	-
C. cyst	780	3,860	-	740	2,080
C. tetraolaris	220	280	20	560	480
Dunaliella parva	160	260	120	160	160
Trochiscia multispinosa	-	-	-	-	20
Chrysophyta	780	2,280	140	300	260
Dinobryon balticum	40	460	20	40	60
D. cylindricum	20	20	-	-	-
Phaeocystis pouchetii	-	40	40	40	-
Synura uvella	-	40	80	60	-
Unidentified	720	1,720	-	160	200
Euglenophyta	-	20	20	160	100
Euglena proxima	-	-	-	20	-
E. schmitzii	-	20	20	140	100
Pyrrophyta	160	120	60	160	100
Dinophysis acuminata	-	-	-	20	-
Glenodinium sp.	-	-	40	-	-
Goniaulax sp.	-	20	-	-	-

Table 49. (Cont'd.)

Seawater depth (m)	1	5	10	20	30
G. catenata	20	-	-	-	-
G. monilata	40	-	-	-	-
Gymnodinium sp.	-	-	-	40	-
G. spirale	-	-	-	40	-
Oxytoxum sp.	-	-	-	20	80
Peridinium minusculum	-	60	-	-	-
Prorocentrum sp.	-	-	20	20	-
P. micans	-	40	-	20	-
P. rampii	40	-	-	-	-
Protoperidinium diabolum	60	-	-	-	20

Table 50. Quantitative compostion and vertical distribution of phytoplankton in Frobisher Bay at station 32, August 27, 1976.

Seawater depth (m)	0	1	5	10	20	30	48
Total phytoplankton (cells/litre)	5,360	10,800	8,060	6,620	4,740	7,380	6,880
Bacillariophyta	5,220	10,280	6,980	6,240	4,200	6,300	6,440
Centrales	4,360	8,600	5,840	5,300	3,540	5,360	5,200
Chaetoceros affinis	240	160	160	300	120	140	260
C. borealis	-	-	-	-	80	20	-
C. decipiens	220	300	420	360	40	320	260
C. furcellatus	3,780	7,580	4,880	4,160	3,060	4,720	4,420
C. septentrionalis	-	20	-	-	40	-	
C. wighami	80	440	160	280	80	-	80
Coscinodiscus lacustris var. *septentrionalis*	-	-	-	-	20	20	-
Cyclotella sp.	-	-	-	20	-	-	-
Thalassiosira sp.	-	-	20	-	20	100	-
T. decipiens	40	100	200	180	80	40	180
Pennales	860	1,680	1,140	940	660	940	1,240
Achnanthes taeniata	20	100	60	-	-	-	20
Amphora sp.	-	-	60	20	-	-	-
A. inelegans	-	-	-	-	-	-	80
A. laevis var. *laevissima*	-	-	80	-	-	-	-
A. terroris	-	40	-	-	-	-	-
Cocconeis pseudomarginata	-	-	-	20	-	-	-
C. scutellum	20	20	-	-	-	20	-
C. scutellum var. *parva*	-	-	-	20	-	-	-

Table 50. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
C. thumensis	20	-	-	-	-	-	20
Cylindrotheca closterium	20	-	-	-	-	-	-
Fragilaria sp.	80	20	-	40	-	-	20
F. pinnata	80	140	180	60	60	60	60
Gomphonema sp.	20	20	20	20	40	-	20
G. exiguum var. pachycladum	-	-	-	-	-	20	-
Grammatophora angulosa	-	-	-	-	-	-	20
G. arctica	-	-	-	20	40	-	-
Licmophora sp.	-	20	20	-	-	20	-
Navicula sp.	60	80	-	20	-	-	20
N. cryptocephala	-	20	-	-	-	-	-
N. debilissima	20	20	-	-	-	-	-
N. directa	-	20	-	-	-	-	20
N. directa var. subtilis	20	80	20	40	-	-	-
N. gelida	-	-	20	-	-	-	20
N. glacialis	-	-	-	-	-	-	20
N. grevillei	20	20	20	-	20	20	20
N. peregrina	-	-	-	-	-	20	-
N. recurvata	20	-	-	-	-	-	-
N. rhynchocephala	40	20	-	-	-	-	-
N. transitans var. derasa	-	120	80	40	-	20	-
Nitzschia sp.	-	20	40	20	-	20	-
N. cylindrus	20	40	-	-	-	-	-
N. frustulum	-	-	20	-	-	-	-

Table 50. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
N. grunowii	380	780	400	560	460	680	720
N. linearis	-	-	-	-	-	-	40
N. sigma	-	20	-	-	-	-	-
Pinnularia sp.	-	40	20	20	-	-	20
P. quadratarea	20	-	-	40	-	20	20
Pleurosigma sp.	-	40	-	-	-	-	-
P. elongatum	-	-	20	20	-	-	40
P. longum	-	-	20	-	-	-	-
Synedra sp.	-	-	60	-	20	40	-
S. tabulata	-	-	20	-	20	-	20
Trachyneis aspera	-	-	-	-	-	-	40
Chlorophyta	120	440	520	220	320	420	240
Chlamydomonas ballenyana	60	280	340	180	200	220	140
C. pulsatilla	60	160	180	40	120	200	80
Staurastrum sp.	-	-	-	-	-	-	20
Chrysophyta	-	40	60	-	40	20	-
Salpingoeca natans	-	40	20	-	20	20	-
Unidentified	-	-	40	-	20	-	-
Euglenophyta	-	-	20	-	-	20	40
Euglena sp.	-	-	20	-	-	-	20
E. proxima	-	-	-	-	-	20	20

Table 50. (Cont'd.)

Seawater depth (m)	0	1	5	10	20	30	46
Pyrrophyta	20	40	20	60	180	160	40
Gymnodinium lohmanni	-	20	-	60	20	40	-
Gyrodinium spirale	20	20	20	-	100	100	20
Oxytoxum sp.	-	-	-	-	20	-	20
Prorocentrum rampii	-	-	-	-	20	20	-
Protoperidinium diabolum	-	-	-	-	20	-	-
Unidentified algal cyst	-	-	460	100	-	460	120

Table 51. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 33, September 1, 1976.

Seawater depth (m)	0	1	5	10
Total phytoplankton (cells/litre)	2,286,500	2,419,655	2,316,090	2,488,250
Bacillariophyta	2,264,980	2,396,790	2,290,535	2,472,110
Centrales	2,254,220	2,391,410	2,282,465	2,469,420
Chaetoceros affinis	21,520	22,865	24,210	20,175
C. atlanticus	-	1,345	-	-
C. decipiens	24,210	18,830	41,695	36,315
C. furcellatus	2,138,550	2,271,705	2,138,550	2,363,165
C. septentrionalis	1,345	4,035	2,690	2,690
C. wighami	5,380	25,555	25,555	13,450
Thalassiosira sp.	1,345	-	-	-
T. decipiens	61,870	47,075	49,765	33,625
Pennales	10,760	5,380	8,070	2,690
Cylindrotheca closterium	2,690	1,345	-	-
Fragilaria sp.	-	-	1,345	-
F. pinnata	2,690	1,345	1,345	-
Navicula sp.	-	2,690	-	1,345
N. directa var. *subtilis*	1,345	-	-	-
N. granii	4,035	-	-	-
N. grevillei	-	-	-	1,345
Nitzschia acicularis	-	-	1,345	-
N. cylindrus	-	-	1,345	-
N. gelida	-	-	1,345	-
N. grunowii	-	-	1,345	-

Table 51. (Cont'd.)

Seawater depth (m)	0	1	5	10
Chlorophyta	14,795	18,830	21,520	9,415
Ankistrodesmus sp.	1,345	6,725	1,345	-
Chlamydomonas ballenyana	10,760	9,415	14,795	8,070
C. pulsatilla	2,690	2,690	5,380	1,345
Chrysophyta	-	1,345	-	-
Phaeocystis pouchetii	-	1,345	-	-
Euglenophyta	2,690	1,345	-	2,690
Euglena proxima	-	1,345	-	-
E. schmitzii	2,690	-	-	2,690
Pyrrophyta	4,035	1,345	4,035	4,035
Goniaulax sp.	-	-	1,345	-
Gymnodinium lohmanni	-	1,345	1,345	1,345
Gyrodinium spirale	1,345	-	1,345	-
Prorocentrum rampii	2,690	-	-	1,345
Protoperidinium diabolum	-	-	-	1,345

Table 52. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 34, July 30, 1976.

Seawater depth (m)	0	5	10	15
Total phytoplankton (cells/litre)	6,720	11,140	1,980	5,440
Bacillariophyta	4,920	6,420	1,560	2,900
Centrales	1,180	1,440	840	1,540
Chaetoceros affinis	60	40	-	60
C. borealis	80	40	20	-
C. decipiens	80	40	-	-
C. furcellatus	20	320	220	140
C. septentrionalis	-	60	20	40
C. wighami	460	-	-	-
Coscinodiscus sp.	-	20	60	-
Cyclotella striata	-	-	20	40
Thalassiosira sp.	-	140	-	40
T. decipiens	380	700	380	1,120
T. nordenskioeldii	100	40	100	100
T. oestrupii	-	40	20	
Pennales	3,740	4,980	720	1,360
Achnanthes taeniata	160	60	-	-
Amphiprora sp.	-	20	-	-
A. alata	-	40	-	20
Amphora inelegans	100	-	120	140
A. inelegans var. *polita*	-	240	-	-
A. laevis var. *laevissima*	40	100	-	-
A. terroris	-	260	-	-

Table 52. (Cont'd.)

Seawater depth (m)	0	5	10	15
Asterionella formosa	-	60	-	-
Cocconeis placentula	-	40	-	-
C. scutellum	100	120	80	40
C. scutellum var. parva	-	40	40	20
C. thumensis	120	80	-	-
Cylindrotheca closterium	-	20		
Cymbella affinis	240	280	20	-
Diploneis didyma	-	20	20	-
D. litoralis	40	-	-	-
D. smithii	-	20	-	20
Eunotia arcus	20	-	-	-
Fragilaria bicapitata	60	40	-	40
F. intermedia	60	40	-	80
F. pinnata	180	600	40	100
F. striatula	60	-	-	-
Gomphonema sp.	40	-	-	-
G. augur	20	40	-	-
G. exiguum var. pachycladum	-	40	-	-
G. gracile	280	-	-	-
Grammatophora sp.	-	20	-	-
G. arctica	-	-	-	20
Licmophora dalmatica	80	40	-	20
Navicula algida	-	20	-	20
N. ammophila	180	80	-	-

Table 52. (Cont'd.)

Seawater depth (m)	0	5	10	15
N. amphibola	-	20	-	-
N. cancellata	-	480	60	180
N. crucigeroides	20	-	-	-
N. cryptocephala	-	100	-	-
N. debilissima	80	-	-	20
N. directa	-	80	-	20
N. directa var. subtilis	60	180	-	40
N. forcipata	-	20	-	-
N. granii	160	-	-	20
N. grevillei	80	140	-	20
N. kariana	40	-	-	-
N. latissima	40	-	-	-
N. lineola	60	80	-	-
N. peregrina	120	20	40	120
N. perlucens	20	-	-	-
N. pygmaea	20	-	-	-
N. scutelloides	-	20	-	-
N. transitans	-	40	-	
N. transitans var. derasa	320	200	-	80
N. trigonocephala var. depressa	20	20	-	-
Nedium affinis	60	-	-	-
Nitzschia acicularis	-	20	-	60
N. cylindrus	60	300	-	-
N. distans	-	20	-	-

Table 52. (Cont'd.)

Seawater depth (m)	0	5	10	15
N. frustulum	-	20	-	-
N. grunowii	320	180	160	-
N. linearis	20	60	-	-
N. lineata	20	40	40	60
Opephora martyi	-	40	-	-
Pinnularia sp.	340	160	-	60
P. interrupta	-	20	-	-
P. quadratarea	-	160	-	80
Pleurosigma elongatum	-	-	-	60
Rhabdonema arcuatum	100	120	-	-
Synedra sp.	-	120	-	20
S. pulchella	-	-	60	-
Tabellaria flocculosa	-	-	40	-
Chlorophyta	100	3,720	100	1,780
Chlamydomonas sp.	-	40	-	100
C. ballenyana	60	-	100	180
C. cyst	-	3,260	-	1,100
C. tetraolaris	-	220	-	260
Cosmarium sp.	20	-	-	-
Dunaliella parva	20	200	-	120
Staurastrum megacanthum	-	-	-	20
Chrysophyta	340	700	80	520
Coccolithus sp.	-	20	-	-

Table 52. (Cont'd.)

Seawater depth (m)	0	5	10	15
Dinobryon balticum	140	320	40	200
D. cylindricum	-	-	20	-
Phaeocystis pouchetii	20	140	-	60
Synura uvella	20	60	-	20
Unidentified	160	160	20	240
Euglenophyta	20	-	40	40
Euglena proxima	-	-	40	-
E. schmitzii	20	-	-	40
Pyrrophyta	20	300	180	200
Glenodinium sp.	-	20	-	60
Goniaulax sp.	-	20	-	40
G. monilata	-	-	-	40
G. scrippsae	-	20	-	-
Gymnodinium sp.	-	20	-	-
G. spirale	-	120	40	-
Peridinium minusculum	20	-	20	-
Prorocentrum sp.	-	-	60	40
P. micans	-	60	20	20
P. rampii	-	-	20	-
Protoperidinium diabolum	-	40	20	-
Unidentified algal cyst	1,320	-	20	-

Table 53. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 34, August 1, 1976.

Seawater depth (m)	0	5	10
Total phytoplankton (cells/litre)	4,500	2,820	6,180
Bacillariophyta	3,440	1,880	4,400
Centrales	560	720	2,040
Chaetoceros borealis	40	-	60
C. decipiens	40	-	160
C. furcellatus	-	140	280
C. septentrionalis	-	20	100
Coscinodiscus sp.	60	20	-
Cyclotella striata	40	-	-
Melosira islandica	-	80	-
Thalassiosira sp.	-	-	20
T. decipiens	360	460	1,160
T. nordenskioeldii	20	-	260
Pennales	2,880	1,160	2,360
Achnanthes taeniata	20	-	20
Amphora inelegans	220	-	40
Cocconeis sp.	-	60	-
C. scutellum	100	20	40
C. scutellum var. *parva*	20	20	40
C. scutellum var. *stauroneiformis*	20	-	-
C. thumensis	40	-	-
Cylindrotheca closterium	20	-	80
Cymbella affinis	160	20	40

Table 53. (Cont'd.)

Seawater depth (m)	0	5	10
Diploneis bomboides	20	20	-
D. smithii	20	-	20
Fragilaria sp.	-	-	160
F. bicapitata	-	-	80
F. pinnata	260	40	120
Fragilariopsis nana	-	-	280
Gomphonema sp.	80	60	-
G. augur	20	-	-
G. exiguum var. pachycladum	-	-	20
Grammatophora arctica	-	-	20
Licmophora dalmatica	60	20	-
Navicula ammophila	-	-	40
N. ammophila f. minuta	240	40	-
N. cancellata	20	-	120
N. debilissima	60	-	100
N. directa	-	-	40
N. directa var. subtilis	240	140	40
N. granii	80	-	-
N. grevillei	40	20	40
N. lineola	40	20	-
N. lyra var. atlantica	20	-	-
N. peregrina	20	20	100
N. pygmaea	-	20	-
N. transitans var. derasa	-	40	140

Table 53. (Cont'd.)

Seawater depth (m)	0	5	10
Nitzschia acicularis	40	-	40
N. brebissonii var. *borealis*	20	-	-
N. cylindrus	40	20	40
N. grunowii	180	340	240
N. lineata	60	100	60
N. seriata	20	20	80
Opephora martyi	80	-	-
Pinnularia sp.	400	20	120
P. quadratarea	100	80	-
Pleurosigma elongatum	-	-	20
P. marinum	-	20	60
Synedra sp.	100	-	
Tabellaria flocculosa	-	-	120
Chlorophyta	280	540	1,240
Chlamydomonas sp.	100	20	-
C. ballenyana	80	100	120
C. cyst	-	180	340
C. tetraolaris	100	200	540
Dunaliella parva	-	40	240
Chrysophyta	500	260	160
Dinobryon balticum	160	140	40
Phaeocystis pouchetii	60	-	20

Table 53.(Cont'd.)

Seawater depth (m)	0	5	10
Synura uvella	-	40	100
Unidentified	280	80	-
Euglenophyta	40	-	40
Euglena schmitzii	40	-	40
Pyrrophyta	240	80	280
Dinophysis acuminata	-	-	140
Glenodinium sp.	-	20	-
Goniaulax monilata	20	20	40
Gymnodinium sp.	20	-	-
Prorocentrum sp.	40	40	-
P. micans	100	-	100
P. rampii	20	-	-
Protoperidinium diabolum	40	-	-
Unidentified algal cyst	-	60	60

Table 54. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 34, August 17, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	15,260	12,120	10,580	12,320
Bacillariophyta	14,880	11,800	10,100	11,860
Centrales	13,280	10,620	8,520	9,960
Biddulphia aurita	-	20	-	-
Chaetoceros affinis	320	360	420	220
C. decipiens	960	760	380	480
C. furcellatus	11,380	8,640	6,880	8,960
C. septentrionalis	100	120	120	160
C. wighami	400	400	400	-
Thalassiosira sp.	60	120	-	-
T. decipiens	60	200	320	140
Pennales	1,600	1,180	1,580	1,900
Achnanthes taeniata	-	-	-	100
Amphiprora concilians	-	-	20	-
Amphora terroris	-	-	100	-
Cocconeis sp.	-	-	-	20
C. californica	-	20	-	-
C. pseudomarginata	-	-	20	-
C. scutellum	40	-	80	20
C. scutellum var. *parva*	-	-	20	-
C. thumensis	-	-	20	20
Eunotia arcus	-	-	20	-

Table 54. (Cont'd.)

Seawater depth (m)	0	5	10	20
Fragilaria sp.	40	-	20	20
F. bicapitata	20	20	-	-
F. pinnata	100	140	180	40
Gomphonema sp.	60	-	20	60
Licmophora sp.	20	-	60	-
Navicula sp.	60	-	100	20
N. debilissima	-	20	-	-
N. directa	-	20	-	20
N. directa var. subtilis	20	-	40	-
N. gelida	-	20	-	40
N. granii	-	-	-	40
N. humerosa	-	-	-	20
N. imperfecta	20	-	-	-
N. rhynchocephala	-	20	-	40
N. transitans var. derasa	-	-	60	40
Nedium affinis	-	-	-	40
Nitzschia sp.	-	20	20	20
N. acicularis	20	-	-	-
N. cylindrus	40	40	20	140
N. frustulum	20	-	-	-
N. grunowii	1,100	860	680	1,120
N. linearis	-	-	20	-
Pinnularia quadratarea	20	-	-	20
Pleurosigma angulatum	-	-	-	60

Table 54. (Cont'd.)

Seawater depth (m)	0	5	10	20
P. marinum	20	-	20	-
Synedra sp.	-	-	20	-
S. tabulata	-	-	40	-
Chlorophyta	180	60	220	100
Carteria vectensis	-	-	-	20
Chlamydomonas sp.	20	20	60	-
C. ballenyana	100	40	100	20
C. pulsatilla	60	-	60	60
Chrysophyta	60	40	60	20
Dinobryon sp.	-	20	-	-
D. cylindricum	20	-	-	-
Phaeocystis pouchetii	-	-	20	20
Salpingoeca natans	40	20	20	-
Unidentified	-	-	20	-
Euglenophyta	-	20	20	-
Euglena sp.	-	-	20	-
E. schmitzii	-	20	-	-
Pyrrophyta	120	200	180	180
Goniaulax cyst	-	20	20	-
G. scrippsae	-	-	-	40

Table 54. (Cont'd.)

Seawater depth (m)	0	5	10	20
Gymnodinium sp.	80	20	80	-
G. lohmanni	-	-	-	40
Gyrodinium spirale	20	140	40	100
Prorocentrum sp.	-	20	-	-
P. rampii	-	-	20	-
Protoperidinium diabolum	20	-	20	-
Unidentified algal cyst	20	-	-	160

Table 55. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 34, August 24, 1976.

Seawater depth (m)	0	5	10	20
Total phytoplankton (cells/litre)	13,700	11,960	5,480	16,300
Bacillariophyta	13,340	11,420	5,100	15,820
Centrales	10,380	9,340	2,360	12,880
Chaetoceros affinis	-	80	-	120
C. borealis	60	-	40	-
C. decipiens	340	420	660	480
C. furcellatus	9,540	8,540	1,360	11,780
C. septentrionalis	80	20	80	80
C. wighami	300	100	-	80
Thalassiosira sp.	-	40	-	60
T. decipiens	60	140	220	280
Pennales	2,960	2,080	2,740	2,940
Achnanthes taeniata	40	-	-	60
Amphiprora sp.	-	-	40	-
Amphora sp.	-	-	-	20
A. inelegans	-	-	-	40
A. terroris	40	-	60	-
Cocconeis californica	-	-	20	-
C. scutellum	20	-	-	40
Cylindrotheca closterium	-	-	40	40
Diploneis smithii	20	-	-	-
Eunotia lunaris	-	-	-	20
Fragilaria sp.	40	-	-	-

Table 55. (Cont'd.)

Seawater depth (m)	0	5	10	20
F. pinnata	160	80	100	280
Gomphonema sp.	20	-	-	40
G. exiguum var. pachycladum	-	20	-	-
Grammatophora angulosa	-	-	20	-
G. arctica	20	-	-	20
Licmophora sp.	-	-	20	-
Navicula sp.	100	80	80	180
N. cancellata	-	-	-	40
N. crassirostris	-	-	-	20
N. debilissima	20	-	20	60
N. directa	-	-	20	100
N. directa var. subtilis	-	-	60	-
N. forcipata	-	-	-	20
N. grevillei	20	20	-	40
N. lineola	-	-	-	40
N. peregrina	-	20	-	-
N. pygmaea	-	-	20	-
N. rhynchocephala	-	-	-	40
N. transitans	20	-	-	20
N. transitans var. derasa	60	20	40	180
N. valida	-	-	-	20
Nedium affinis	60	-	-	-
Nitzschia sp.	40	-	-	20
N. acicularis	60	-	-	-

Table 55. (Cont'd.)

Seawater depth (m)	0	5	10	20
N. cylindrus	40	-	80	120
N. frustulum	-	20	-	-
N. gelida	20	-	-	-
N. grunowii	2,080	1,740	2,020	1,300
N. linearis	20	-	-	-
Pinnularia sp.	-	-	-	60
P. quadratarea	40	-	-	-
P. quadratarea var. *densestriata*	-	-	-	20
Pleurosigma longum	-	-	20	20
P. marinum	20	40	-	-
Rhabdonema arcuatum	-	20	40	40
Synedra sp.	-	-	40	20
S. tabulata	-	20	-	-
Tabellaria flocculosa	-	-	-	20
Chlorophyta	260	300	160	240
Chlamydomonas ballenyana	260	180	140	220
C. pulsatilla	-	120	20	20
Chrysophyta	20	40	40	20
Salpingoeca natans	20	40	40	20
Euglenophyta	20	40	-	
Euglena proxima	20	-	-	-
E. schmitzii	-	40	-	-

Table 55. (Cont'd.)

Seawater depth (m)	0	5	10	20
Pyrrophyta	40	160	180	220
Gymnodinium sp.	20	20	-	-
G. lohmanni	-	-	40	80
Gyrodinium spirale	20	140	140	60
Protoperidinium diabolum	-	-	-	80
Unidentified algal cyst	20	-	-	-

Table 56. Quantitative composition and vertical distribution of phytoplankton in Frobisher Bay at station 34, August 27, 1976.

Seawater depth (m)	0	1	5	10	20
Total phytoplankton (cells/litre)	16,540	7,940	14,720	8,620	5,760
Bacillariophyta	15,720	7,340	13,660	8,000	5,520
Centrales	14,140	6,140	11,460	7,160	4,500
Chaetoceros affinis	280	60	120	80	20
C. decipiens	900	480	920	480	240
C. furcellatus	12,440	5,120	10,080	6,360	4,020
C. septentrionalis	120	20	20	20	-
C. wighami	220	300	280	40	-
Thalassiosira sp.	20	40	-	40	100
T. decipiens	160	120	40	140	100
T. nordenskioeldii	-	-	-	-	20
Pennales	1,580	1,200	2,200	840	1,020
Achnanthes taeniata	-	-	100	-	20
Amphora sp.	20	40	40	-	-
A. laevis var. *laevissima*	20	-	20	-	-
A. terroris	-	-	-	-	20
Cocconeis pseudomarginata	-	-	-	-	20
C. scutellum	-	-	20	20	20
C. scutellum var. *parva*	-	-	-	-	40
C. thumensis	-	-	20	-	-
Cylindrotheca closterium	20	20	60	20	-
Cymbella sp.	-	-	-	20	-
C. affinis	-	40	-	-	-

Table 56. (Cont'd.)

Seawater depth (m)	0	1	5	10	20
Diploneis bomboides	-	-	-	-	20
D. smithii	-	20	-	-	-
Eunotia sp.	-	20	-	-	-
Fragilaria sp.	-	80	-	20	60
F. pinnata	320	200	400	120	60
Grammatophora angulosa	-	-	-	20	-
G. arctica	-	-	-	-	40
G. hamulifera	-	-	-	-	20
Licmophora sp.	-	20	-	-	20
Navicula sp.	100	100	100	-	-
N. crucigeroides	-	-	20	-	-
N. debilissima	20	40	60	20	-
N. directa	-	-	40	-	-
N. directa var. subtilis	-	20	80	40	20
N. forcipata	-	-	20	-	-
N. gelida	-	-	20	-	-
N. grevillei	40	120	80	40	-
N. transitans var. derasa	-	40	100	40	20
N. trigonocephala	-	-	40	-	-
Nedium affinis	20	-	-	-	-
Nitzschia acicularis	-	-	-	20	20
N. cylindrus	180	-	100	80	-
N. frustulum	-	40	-	20	-
N. grunowii	800	340	800	260	420

Table 56. (Cont'd.)

Seawater depth (m)	0	1	5	10	20
N. linearis	-	20	-	-	-
Pinnularia sp.	-	-	-	40	-
P. quadratarea var. *bicontracta*	-	-	20	-	-
Pleurosigma sp.	-	-	-	20	-
P. angulatum	-	-	-	20	60
P. longum	-	-	20	-	20
Rhabdonema arcuatum	-	-	-	-	20
Synedra sp.	20	40	40	-	100
Tabellaria sp.	20	-	-	-	-
Trachyneis aspera	-	-	-	20	-
Chlorophyta	140	180	40	180	160
Chlamydomonas sp.	20	-	-	40	20
C. ballenyana	120	140	40	140	80
C. pulsatilla	-	40	-	-	60
Chrysophyta	60	20	120	-	-
Dinobryon sp.	20	20	20	-	-
D. balticum	-	-	40	-	-
D. cylindricum	20	-	-	-	-
Phaeocystis pouchetii	-	-	40	-	-
Salpingoeca natans	20	-	20	-	-

Table 56. (Cont'd.)

Seawater depth (m)	0	1	5	10	20
Pyrrophyta	220	80	180	120	60
Goniaulax sp.	80	-	20	20	20
Gymnodinium sp.	-	-	20	-	-
G. lohmanni	60	20	100	40	20
Gyrodinium spirale	40	20	40	40	20
Peridinium sp.	-	20	-	-	-
Prorocentrum rampii	20	20	-	-	-
Protoperidinium diabolum	20	-	-	20	-
Unidentified algal cyst	400	320	720	320	20